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Volume 5
1924/1925

INTER-STATE
Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MI[illegible] RODUCERS ASSOCIATION, Inc.

VOLUME V | WEST CHESTER, PA., AND PHILADELPHI[illegible] '4 | NUMBER 1

HAVE YOU YO[illegible] PORARY PERMIT?

Milk Producers and Distributors Must Have Temporary Permits by May 31st, 1924

The Sanitary Regulations which were adopted at the annual meeting of the Inter-State Milk Producers Association and which will be enforced through the Quality Control Department of the Philadelphia Inter-State Dairy Council, have the unqualified approval of the Philadelphia Department of Public Health, the Department of Agriculture and the Department of Health of the Commonwealth of Pennsylvania and other states and also the health authorities of other cities and towns in the Philadelphia Milk Shed area.

The approval of the Department of Health of the city of Philadelphia has taken a very practical form. When the city, in its regular milk inspection finds it advisable to have visits paid to farms, the milk from which is not meeting the requirements of the Board of Health in every particular, it calls upon the Quality Control Department. A field representative soon visits the farm, giving advice for improving methods and conditions and so makes it possible for producers to continue shipping to Philadelphia.

The Philadelphia Board of Health and the Quality Control Department of the Dairy Council are closely co-operating in this program.

The Quality Control Department, had, at the time we go to press, many thousand temporary permits issued.

After May 31, producers of milk who are shipping to co-operating dealers will not have their milk accepted at receiving stations or dealers' plants, unless they have made applications for and received their temporary permits.

Do not leave the application for your permit until the last minute—or it may be possible that your milk might be refused on June first, or until you have secured your permit.

You will have fifteen to twenty days after reading this issue of the Review.

If by any chance you have applied for your permit and failed to receive it, look up the list of permits granted which will be posted at recieving stations, by all co-operating milk dealers. If you do not find your name on the list, write the Dairy Council at once for duplicate application blank.

Temporary permits will be all that will be required by producers of milk on June first. They will be able to ship milk under such permit until their farms have been inspected.

With the vast amount of territory to be covered by inspectors it may be some time before your farm may be reached, but all reasonable improvements should be made at as early a date as possible.

This does not mean that you must unnecessarily inconvenience your farm work to take care of major projects such as refitting your barns or tearing out your hay in the mows to board floors. The inspector will arrange satisfactory time for work, but the necessary cleaning up of cow stables, whitewashing, sanitary barn yards, care and cooling of milk, etc., will be insisted upon. Small top milk pails are absolutely necessary.

Small Top Pails

Some milk producers object to the use of the small top pail if they have never tried them. It is becoming a general requirement in the production of clean milk, except of course when the milking machine is used. The use of such pails is becoming more and more general in all sections of the country. New Board of Health regulations almost invariably insist on their use.

It has been a general observation that when farmers try out the small top milk pail they would not use any other kind. Small top pails can be procurred from the receiving stations of the various dealers, from local merchants and from dairy supply houses.

Reports of inspectors are largely to the effect that the actual amount of new work necessary under the regulations is comparatively small. Farmers, as they become more fully informed on the requirements under the new regulations, find little to object to in the program.

Objections

It seems remarkable that in the receipt of the many thousand applications for permits, not over twenty have made definite objections to the plan.

Not over a half dozen farmers have directly stated on their applications that they would fail to comply. Probably have a dozen others—one or two cow dairymen—have informed us that they would not go to the expense of cleaning up. These propose shipping to butter creameries or to discontinue dairying.

New Jersey Survey

During the past month the field inspectors of the Dairy Council have spent a large part of the time in New Jersey and such portions of Pennsylvania covering farms shipping milk to plants, stations and by direct shipment to various co-operating dealers.

Work was begun in this territory because road conditions were most satisfactory in the early spring.

In the district covered, some 1800 farms were inspected. Of this number a few producers were found who would not go along with the regulations. They preferred to hunt for a non-co-operating dealer, if possible. With probably three exceptions, located in south New Jersey, every farmer was willing to co-operate. In a few cases one or two cow dairymen who have been selling simply the surplus of home consumption, decided that rather than go to any expense on dairy barns, milk houses, etc., they would discontinue the shipment of milk.

Considerable work has been done in the districts shipping milk direct to buyers in the Philadelphia market. These cover inspections largely within the radius of a few miles from that city.

The inspection forces will probably make their next drive on the Eastern Shore of Maryland and Delaware districts.

The Quality Control Fieldmen

These inspectors are all men who have had agricultural college education. Some have served in cow testing associations and advanced registry work, others have been identified with the production and handling of milk, both on the farm and in distribution work. Through experience and training they are able to apreciate the conditions on the farm from the viewpoint of the farmer. The necessary rquirements under the new sanitary regulations are thoroughly familiar to all of them.

QUALITY CONTROL DEPARTMENT, FIELD MEN
Left to right: bottom row—D. A. McCarthy, C. I. Cohee, Director; W. H. Harper, Assistant Director; T. C. Campbell; top row: C. A. Wilson; Wesley Holmes; Robert Dwyer; J. O. Eastlack, Henry Weaver.

The following brief summary gives the training and experience of the field men now engaged in the inspection work.

C. I. Cohee, *Director of Department*
Training includes two years at Pennsylvania State College in Agriculture. Born and raised on dairy farm in New Jersey and Pennsylvania. Three years in cow testing association. Three years in charge of Pennsylvania State College herd. Two years in U. S. Department of Agriculture. Three years on du Pont Agricultural Extension Work.

W. H. Harper, *Asst. Director of Dept.*
Training includes two years at Pennsylvania State College. Born and raised on dairy farm. Cow testing association work two years. One year in advanced registry work.

T. C. Campbell
New Jersey College of Agriculture, four years. Raised near Metuchen, N. J. Certified Dairy Experience. Came to Dairy Council direct from college.

D. A. McCarthy
Pennsylvania State College in Agri-

(Continued on page 6)

THE DAIRY COW AS A MARKET FOR FARM CROPS

E. B. Fitts, Pennsylvania State College

Radio Talk from Penn State Radio Station, W. P. A. B.

The most important agricultural industry in Pennsylvania, and the one returning the greatest amount of wealth to the farmers of the State is dairying.

Dairy cattle serve the farmer in ways that are vital to his success. They provide a market for his crops, give employment to labor, make easier the maintenance of soil fertility and provide an essential food. The mission of most farm animals is to convert the rough, bulky crops of the farm into a food supply for human kind. Dairy cattle are far more efficient in this important work than are other classes of farm stock. It is, however, as a market for farm crops that the dairy cow performs her most essential service to the farmer. The best farming practice requires that a variety of crops shall be grown on the farm in a more or less regular rotation. This practice gives a number of crops, some of them very bulky, for which a profitable market must be found if the farmer is to prosper financially. The efficient marketing of crops is the farmers most difficult problem. Here is where the dairy cow renders invaluable aid. She converts a wide variety of crops, for which often times no other profitable market exists, into a single, concentrated, uniform product, milk, for which there is always a cash market. She thus becomes the single medium through which a large part of the crops on more than 150,000 farms in Pennsylvania move to market. The farmers marketing problem by this means, becomes greatly simplified and resolves itself into (1) finding the best market for his one product, milk, or products made from milk, and (2) in obtaining the greatest possible efficiency or working ability in his dairy herd.

The price he receives for his milk is very largely controlled by general market conditions and there is little the farmer can do to increase price, beyond producing a product of high quality and in uniting with other dairyman in co-operative effort to better or improve general marketing conditions and to increase consumption.

In the matter of improving the efficiency or working ability of his herd, however, the farmer very often has opportunity for making a marked improvement. We have referred to the dairy cow as a market for farm crops. She is a good market or a poor market just according as she has high or low milk producing ability.

Cow Testing Association records on file at the Pennsylvania State College reveal the fact that there is a tremendous difference among cows in their ability to convert feed into milk. Instances are very common where one cow will return twice or even three times as much milk from one ton of hay or other feed, of a given amount, as will another cow standing beside her and working under identical conditions and also that this difference continues month after month and year after year, or so long as both cows remain in the herd. This condition where found is disastrous to the dairyman's success. The profits resulting from the work of the better cows is consumed by the losses caused by the poorer ones and net profits are destroyed. Weeding out the inferior cows thus becomes a matter of first importance.

Unfortunately one cannot tell by simply looking at a cow whether she is a good or a poor market for feed consumed. This can only be ascertained through following some system of record keeping that will reveal the actual yearly milk production of each cow in the herd. This yearly production may, and not infrequently does, vary from 3000 pounds of milk to 10,000 pounds or more of milk from different cows in the same herd. **The amount of milk and butter fat produced by a cow during the year is the best measure of her value or usefulness to the farmer.** It is impossible to state just where the dividing line rests between profitable and unprofitable cows, but most farmers interested in profit from the dairy, look with suspicion upon a cow that produces less than 6,000 pounds of milk or 240 pounds of butter fat in a year.

Conditions continue to exist for years in many dairy herds that would not be tolerated in other lines of work on the farm. Keeping cows in the herd that return but one half the amount of milk from a given amount of feed as is yielded by other cows is parallel to raising a crop of wheat and selling one half at market price and then letting the dealer have the remaining half at half price. One is as good a business practice as the other.

Dairymen desiring to increase milk production per cow and thus improve marketing and profit making conditions on their farms should establish at once a system of record keeping that will reveal the working ability of each cow in their herd. A milk scale may be purchased and the milk from each cow weighed daily, or the dairymen may join a cow testing association.

A cow testing association is an organization of dairymen who unite in employing a competent man to visit the herd of each member once a month. While at the farm this man weighs and tests the milk of each cow and also ascertains the amount of feed consumed by each, recording all figures in a specially arranged record book. At the close of the year the monthly records are totaled and the working ability of each cow is revealed. Each can be judged on her individual merits.

There are now nearly 50 cow testing associations in Pennsylvania. The Agricultural Extension Division of the Pennsylvania State College assists in organizing associations in dairying communities. It also supplies all necessary blanks and record books and helps to locate competent men as testers. The cost is nominal in comparison with benefits received. If interested, communicate with your County Agent or write the Extension Division at State College.

Pennsylvania farms are adapted to dairying. A market exists close at hand for milk and dairy products. Good cows have always paid profitable prices for feed consumed.

STATE TESTERS CONFERENCE WITH FIELD MEN OF INTER-STATE MILK PRODUCERS ASSOCIATION

A conference of the field men of the Inter-State Milk Producers Association with the State Testers of the various states in our territory, was held in the offices of the Inter State Milk Producers Association, Monday, April 28th, 1924.

J. Walter Mitten, Harrisburg, Pa., represented the Pennsylvania Department of Agriculture; Prof. F. C. Button, deputy in charge of Creamery Inspection in New Jersey and G. I. Ball, field representative of state of New Jersey Agricultural Extension Station, represented New Jersey; Prof. F. J. Doan, of Baltimore, represented Maryland; T. A. Baker, of Delaware was unable to be present. All the field men of the Inter-State Milk Producers Association were present, also De Witt Morris, representing the Dairy Laboratories, Philadelphia.

The conference was called for the purpose of outlining a policy to be used in future work by all men in our territory engaged in check testing.

In addition to discussing the application of the Babcock Test laws in the different states the conference took up in detail the various steps which must necessarily be carried out to insure proper results.

Sampling

Sampling shall be done by, or under the supervision of a licensed operator, (except in New Jersey permits to weigh and sample are necessary). An aliquot portion of each days milk shall be taken preferably from weigh tank as soon as milk is emptied therein.

Sample Jars

Eight ounce sample jars are preferred with tightly fitting rubber or glass stoppers. Mold growth may be prevented by thorough washing with Formaldehyde solution.

Labeling

Composite sample bottles must be properly labeled. Gummed labels wash off when samples are placed in hot water and are not satisfactory.

Keeping Sample

Composite samples must be kept in proper condition. A suitable preservative shall be added with the first days milk and as each additional days milk is added, gently rotated to insure thorough mixing of preservative with milk. Excessive heat and sunlight cause deterioration of composite samples. If temperature conditions about receiving door are such that samples cannot be kept in proper condition, portable racks or trays should be provided in which to remove them to a temperature suitable to insure their preservation.

Preparation for Sampling

In preparing samples for pipetting they should be heated. After fifteen days they will accumulate a certain amount of hard cream which may not be dissolved unless heated. 90° to 95° F. is generally sufficient. They must not be heated over 110° F. If samples have been carefully rotated each day cream is not likely to adhere to sides of bottles, but if cream does adhere to sides of bottles, a piece of flat hard rubber is best for scraping sides.

Glassware

Only such glassware as has been inspected and approved by proper state authorities may be used for testing milk where payment is made on basis of percentage of fat contained therein. Glassware must be properly washed and cared for.

Centrifugal Machines

Steam centrifugal machines are in general use throughout our territory. Where electric machines are used they should have some kind of heating apparatus to insure proper temperature while whirling.

Reading of Tests

Fat tests should be read at a temperature between 130° F. and 145° F. To insure which a water bath is essential Dividers should be used. Readings should be from top to bottom of fat column.

The various conditions prevailing and problems met throughout our territory were thoroughly discussed. It was the general opinion of those present that failure to comply with the provisions of the Babcock Test laws were no longer excusable. Dealers have had time enough to obtain proper equipment and licensed operators to know the meaning of the laws.

FIELDMEN'S CONFERENCE

A conference of the fieldmen of the Inter-State Milk Producers Association was held in our offices in the Boyertown Building, on Monday afternoon, April 28th, 1924.

Plans were outlined and discussed, some changes in testing schedules for greater efficiency were suggested.

Mr. Balderston Talks

At the request of the fieldmen present, Mr. Balderston gave a very thorough outline of the history, method of operation, selling plan and prices obtained by the leading milk producers associations throughout the United States.

There are about 25 other milk producers associations in the United States, each having problems peculiar to its own locality. Conditions differing widely must consequently be handled differently.

It was the opinion of the fieldmen that they should have this information in order to discuss intelligently with our members the problems of co-operative marketing of their leading product—milk.

COCHRANE AYRSHIRE JUDGE

Barclay Farms Manager on Official List of Eight Chosen by Ayrshire Breeders' Association

Mr. John Cochrane of Rosemont, Pa., has been appointed official judge of Ayrshires at 1924 Fairs and Shows by the Ayrshire Breeders' Association, Brandon, Vermont. In addition to the State Fairs where he will make the awards on the Red and Whites he was given the highest honor of the circuit by being chosen by the Association to make the placings at the National Dairy Exposition, the leading show of the country. He has declined this appointment because of the decision to exhibit Barclay Farm Ayrshires there.

Other men selected as Mr. Cochrane's associates of the United States and Canada are: Professor J. B. Fitch, Manhattan, Kansas; William Hunter, Grimsby, East Ontario; Professor H. H. Kildee, Ames, Iowa; Gilbert McMillan, Huntingdon, Quebec; J. A. Ness, Auburn, Maine; L. E. Ortiz, Bernardsville, New Jersey; and Professor William Regan, Davis, California.

SILAGE DECREASES THE COST OF MILK

E. S. Savage

From the amount of milk that is being purchased at the present time it looks as though the man who is to make a profit from his dairy cows must cheapen the cost of production all that he possibly can. The high freight rates on grain for dairy cows make the cost of concentrates higher than it used to be when freight rates were lower. The value of good land in the East causes that land to be used mostly for cash crops. Much of the feed for dairy cows is in the form of by products and these by products arise in the middle West and have to be shipped East.

Therefore, it is necessary for us to grow those crops which will make the best use of land and produce the greatest amount of total digestible nutrients to the acre. Corn and alfalfa hay appear to be the two crops that will do this for us to the best advantage.

Professor Morrison in the last edition of "Feeds and Feeding" has given us a table which emphasizes this more than any table that I know of:

Average returns per acre from corn and other crops.

	Yield per acre	Digestible crude protein	Total Digestible nutrients
Corn (ears and stover)	3,574	150	2,251
Alfalfa hay	4,372	463	2,250
Clover hay	2,624	199	1,336
Timothy hay	2,340	70	1,134

These figures are taken from averages the country over. To go with silage one should try to get alfalfa hay or if alfalfa cannot be grown on the farm, then one should grow soybean hay or clover hay.

In any case the proper use of silage will greatly cut the cost of the ration in proportion to the amount of milk yielded.

Professor W. J. Fraser of the University of Illinois has given us the results of experimental work on a 20 acre farm carried on in connection with the Agricultural Experiment Station. This is a classical experiment in showing the value of silage. Professor Fraser reported the results of this experiment early in 1923 in Hoard's Dairyman.

The average production of 12 cows on silage and afalfa hay alone for one year was 8318 lbs of milk containing 284 lbs. of fat. Remember that these cows in making this production of 8318 lbs of milk and had no grain at all. All of the 12 cows came through in good condition except one. She was somewhat emaciated. She produced on alfalfa hay and silage alone 10,430 lbs. of milk containing 351 lbs. of fat. These 12 cows were grade cows and in Professor Fraser's opinion no one of them was an exceptionally great producer.

In the six year period over which Professor Fraser's experiment ran, the averages for 11 cows are available. The average for all 11 cows for the six years which includes the time they were dry as well as the time when they were in milk, was 7,470 lbs. of milk per cow per year. In averaging up the amount of the different feeds in the ration for this whole time, we find the average ration was 38 lbs. of silage, 15 lbs. of alfalfa hay and 1 lb. of corn meal. The practice was to feed alfalfa hay and silage with no grain at all to the cows of lower production and to supplement the silage and hay of the highest pro-

(Continued on page 7)

How your milk supply

IS PROTECTED

MORE than a year ago the Philadelphia Inter-State Dairy Council began building a department known as the Quality Control Department of the Council. The Inter-State Milk Producers' Association and the distributors of milk are heartily co-operating in the movement.

This work has now developed to the point where the Quality Control Department has strict supervision of the production and handling of the milk supply of all members supplying Philadelphia and other cities in the "Philadelphia Milk Shed" area. This includes regular inspection of the dairy farms, herds and barns, country cooling stations and city distribution plants, protecting and safeguarding your milk at every point.

These Sanitary Regulations have the approval and support of the Philadelphia Department of Public Health, the Department of Agriculture and the Department of Health of the State of Pennsylvania and other States, and also the health authorities of other cities and towns in the area.

It is the purpose of the Philadelphia Inter-State Dairy Council to have the milk supply in the territory in which it operates superior to that sold in any other part of the United States.

The milk producers and distributors of milk co-operating with the Council, through this movement, have been the first in the world to take such an advanced stand.

Philadelphia
Inter-State Dairy Council

DRINK MILK EVERYBODY

Boyertown Building
1211 ARCH STREET
PHILADELPHIA, PA.

DRINK MILK EVERYBODY

(See page four column one)

DAIRY COUNCIL ACTIVITIES

Dramatic Departments Has Busy Month

Statistics are now availably for the volume of work done in some of the important departments of Dairy Council Work.

The Dramatic Department is an invaluable instrument to the Philadelphia Inter-State Dairy Council for new territory, and serves as a fitting closing to a campaign as well as for use throughout the term. The plays and stories as presented by the young women of the Dairy Council's Dramatic Department are not only excellent ice breakers but they are an important supplement to the work of the Nutrition Department. The message they carry makes a permanent impression on the children.

In the last two months the work of this department shows some interesting facts. The attendance at the plays in February totaled 8,490, and during March reached 16,350. The average attendance at Object Talks in February was 27,361, while during March it reached 29,868. The total attendance at various Dramatic Department performances reached 38,322 in February and 46,893 in March.

These figures do not adequtely tell the story. They show that a large proportion of our population has had the benefit of the work of the Philadelphia Inter-State Dairy Council. Audiences of 250 to 500 are preferable to larger audiences. When the group is too large the children in the back of the room cannot always hear the lines. Sometimes the conditions are crowded and uncomfortable and the children miss some important part of the play. Included in these figures are also a number of classes of undernourished children, which are usually made up of small groups of 15 to 25. For instance, in March there were 120 talks to groups of 50 or less.

Groups reached during these two months include schools in Philadelphia, Trenton, Atlantic City, Wilmington, Chester and neighboring cities. Two interesting meetings were those at the Trenton Y. M. C. A. and the Poor Richard's Club, of Philadelphia.

The Poor Richard's Club is a club of advertising men. Mr. McCurdy, of the McCurdy Films Company, arranged for Dairy Council work to be presented at a meeting of the club. Accordingly, Miss Keenan gave a short talk explaining the methods of the Dairy Council work. Miss Philbrook gave her chalk talk, Miss Barber, the "Monologue", and Miss Keenan told two stories. This club was intensely interested in the demonstration and many contacts for future work were established.

The largest feature of the program during these two months was the community meeting of the Hackett School, held at the Kensington High School. At this demonstration four plays were given to an audience of 1300 parents and children.

WATER FOR LIVESTOCK

If horses, cattle and sheep can get a good drink once or twice daily, they will do very well. Hogs and poultry should have water more frequently, preferably close at hand where they can drink whenever they want it.

Greens, even if they're canned ones, are just the thing for tag-end-of-winter menus.

INTERSTATE
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Editorial

The announcement of the new sanitary regulations, effective in the Philadelphia Milk Shed on May 31st, has gone forth to the consuming public.

On page three of this issue we are reprinting a copy of the advertisement which appeared recently in the leading newspapers in the city of Philadelphia.

This, as you will note, tells the public what we are doing to insure a safe milk supply—and that this movement was started by the farmers themselves. That it has the endorsement and support of the Department of Agriculture of the Commonwealth of Pennsylvania, Boards of Health of the State of Pennsylvania and the city of Philadelphia, as well as those of neighboring states and that it has the support of the small towns and urban communities in Pennsylvania, Delaware and New Jersey.

It is our duty to support this movement in every way possible, so that we may be assured of a greater consumption of milk by the public in the Philadelphia Milk Shed.

CLEAN UP WEEK

The program of "cleaning up" at this season of the year, is taking a strong hold all over the country, not only on the farms but in the cities and urban communities as well.

From east to west and from north to south, come plans for clean ups embracing all classes and character of work.

The large metropolitan cities and many towns and country localities now have such programs under way.

"Fix-up and grease-up weeks" are announced in the far west. They apply largely to farm practice, featuring the cleaning up of farm implements for the coming seasons work.

"Paint-up weeks" call to mind the necessity of making repairs and repainting of buildings.

Pennsylvania Wheat Farmers announce May 5th to 10th as the time for their clean-up week. This clean up is directed against the angumois grain moth, which destroyed five million bushels of wheat in 24 counties last year. Each farmer in the section infested with this pest should rout the moth from its winter hiding place by doing a thorough job of barn cleaning before May 10th.

Street and Alley Clean-Up Days, are parts of city programs. "Fly and Mosquito Clean-Up Days," "Put in Order Days", and many other features are noted.

The spirit of cleaning up at this season before the busy spring and summer season arrives, means much to the dairymen. For some time we have called attention to the care of barns and stables, greasing the harness and other farm necessities, and much work of this character has been done.

Clean-up weeks are becoming more and more popular all over the country.

If you have not cleaned up on your farm, utilize the first rainy day for the indoor work.

OFF FLAVORED MILK

The milk producer who insists on shipping bad flavored milk, not only kills his own market but jeopardizes his neighbors' market as well.

Garlic flavored milk cannot be marketed as fluid milk. Milk must be free from all objectional odors to insure a maximum consumption by the public.

Already reports are coming in that off flavored milk has been dellevered to receiving stations in some sections of the territory and unless the stiuation is immediately corrected, some receiving plants may be closed.

With a flush supply of milk on the market, particular care should be observed so that your milk supply should be of the best.

SANITARY REGULATIONS AND REQUIREMENTS IN CLEVELAND, OHIO, MARKET

Sanitary regulations for the production and handling of milk on the farms supplying Cleveland, Ohio markets, have just come to hand.

These regulations have been sent out and are being enforced by the Chief of the Bureau of Food and Dairy Inspection of the city of Cleveland.

The regulations include practically all of the provisions under the Sanitary Regulations in the Philadelphia Milk Shed and in addition, go much farther.

The general classifications include regulations pertaining to cow stables, milk houses, care and handling of milk on the farm, physical care and condition of cows, and of employees; care and nature of milking utensils and equipment, the use of the small top milk pail, and other important features.

The Inter-State Milk Producers Association has inaugurated a new contact policy between the home office, its officers, directors and the men in the field.

Beginning with April, a semi-monthly statement or letter, will be prepared by H. D. Allebach, president of the Association and sent to each officer, director and man in the field.

This will cover a statement of market conditions, developments and activities in the field.

The first of these letters was sent out in mid-April and gives a very concise statement of market conditions.

This new policy will go a long way toward keeping directors and field men informed in all branches of association work.

SECRETARY HOLMAN TO ATTEND WORLD CONFERENCE AT ROME

Secretary Charles W. Holman of the National Cooperative Milk Producers' Federation sailed April 19th, on the President Roosevelt, to attend the International Institute on Agriculture at Rome, Italy, which opens May 2nd.

Mr. Holman was recommended by Secretary H. C. Wallace of the Department of Agriculture to be appointed by the Secretary of State, Charles Evans Hughes, as one of the official delegates to the Institute.

While abroad he will make agricultural studies in Italy, Switzerland, Germany, Denmark, and Great Britain, with particular reference to dairy conditions and to the vegetable oil industries. He will return to the Washington office on or before June 21st.

The office of the National Cooperative Milk Producers Federation will run as usual and all requests will be given prompt attention but matters of a policy character should be covered in letters addressed to President John D. Miller, in care of the Dairymen's League Cooperative Association, Inc., 120 West 42 nd Street, New York City, New York.

Keep Temporary Permits

ON FILE IN YOUR MILK HOUSE OR DAIRY STABLE

Field Men must consult them when making inspection.

IF POSSIBLE TACK PERMITS ON MILK HOUSE WALL

FARM MACHINERY HIGH—SPRING DEMAND NOT BRISK

Reports coming to Secretary F. P. Willits, of the Pennsylvania Department of Agriculture, indicate the buying of farm machinery in this State will not be brisk this spring. Farmers say machinery prices are too high.

Some sprayers, dusters, potato planters and tractor equipment are being bought, however, but the tendency is to repair old machines and to buy second-hand apparatus at sales. There is interest in labor-saving machinery as a partial means of offsetting the shortage of farm help, but farmers say they will wait until prices are more in line with their income before making extensive purchases.

It is reported manufacturers do not expect much change in farm machinery prices this year. They point to the fact that they buy steel in competition with automobile manufacturers and structural concerns, and hire their labor in competition with a high industrial scale of wages, with the result their margins are closer than a pre-war basis. The implement dealers consider the business outlook for the year as slightly better than last year.

CLOVER SEED

A great deal of imported red clover seed is now being offered for sale. This seed may be satisfactory but it is less hardy and more subject to disease than home grown seed. Native seed should have the preference.

DIRECTORS MEETING

The regular meeting of the Board of Directors of the Inter-State Milk Producers' Association was held on Saturday, April 26th, at the officers of the association in Philadelphia.

Of the total of 24 directors, 21 either, were in attendance or had representatives present.

Reports of the officers and committees were received and formally acted upon.

A very complete report on the work of the Quality Control Department of the Philadelphia Inter-State Dairy Council, in charge of the inspection and enforcement of the new Sanitary Regulations was made by C. I. Cohee.

Detailed records of the percentage of farmers applying for permits, and the number of permanent permits issued was given.

Out of the 1247 dairies inspected, less than twenty five might be considered as unable to ship milk. As a rule these were small dairies of 1, 2 or 3 cows, where farmers had a large amount of clean up work to do and who would rather discontinue shipping milk.

Barn Inspection in New Jersey has been practically concluded.

Permanent Permits are being issued as fast as the clean up work has been completed.

Meetings with milk producers are being held all over the milk shed and the attitude of farmers toward the regulations have been very satisfactory.

Milk distributors, for the greater part, are cooperating in this clean up work throughout the entire milk shed.

The general trend of the milk market was reviewed by H. D. Allebach. Conditions of supply and demand were carefully studied.

With the heavy flow of milk, not only from our own producers, but from outside markets as well, together with the low price of butter, the general attitude of the market has not been particularly encouraging. The market situation regarding milk for condensing purposes was also discussed.

Formal reports from each director present were received, thus enabling the board to become fully acquainted with the market for milk in the respective districts of the association. Labor and feed prices and conditions were also touched upon. Many farmers are almost entirely out of hay and corn fodder and so will be compelled to exercise unusual care in turning to grass earlier than usual, particularly in districts infested with garlic. The situation regarding the conditions in the nearby markets as well as the world's market situation were also discussed.

The matter of price differentials for butter fat were also considered and a committee was appointed to study this situation.

Cattle feeders who finish on grain for market fared very well during the past year says the United States Department of Agriculture. Prior to the war cattle ranging in weight from 1,200 to 1,350 pounds were about 17 per cent above the price of range cattle. In 1922 cattle of this weight sold about 36 per cent above the price of range cattle. In 1922 good to prime cattle were about 50 per cent above the price of feeder steers, whereas in September, 1923, they ranged to about 70 per cent above. The high industrial activity has given a good market for good beef and has stimulated a demand for the higher grades of cattle which come finished from the feed lots of the Corn Belt.

LATEST MARKET PRICES

Philadelphia Selling Plan

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1924. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1923.

Beginning with January milk will be paid for on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount will be paid for on the average New York 92 score butter price for the month, plus 20 per cent. Milk in excess of an amount equal to the basic quantity will be paid for on a flat average New York 92 score butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

APRIL BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.75	3.64	7.8
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

APRIL BASIC MILK
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	$2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.318	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

APRIL SURPLUS PRICES
F. O. B. Philadelphia

Test per cent.	Class I per 100 lb.	Class I per qt.	Class II per 100 lb	Class II per qt.
3.	$2.01	4.3	$1.70	3.65
3.05	2.03	4.35	1.72	3.7
3.1	2.05	4.4	1.74	3.7
3.15	2.07	4.45	1.76	3.8
3.2	2.09	4.45	1.78	3.8
3.25	2.11	4.5	1.80	3.85
3.3	2.13	4.55	1.82	3.9
3.33	2.15	4.6	1.84	3.95
3.4	2.17	4.65	1.86	4.
3.45	2.19	4.7	1.88	4.
3.5	2.21	4.75	1.90	4.05
3.55	2.23	4.75	1.92	4.1
3.6	2.25	4.8	1.94	4.15
3.65	2.27	4.85	1.96	4.2
3.7	2.29	4.9	1.98	4.25
3.75	2.31	4.95	2.00	4.3
3.8	2.33	5.	2.02	4.3
3.85	2.35	5.	2.04	4.35
3.9	2.37	5.05	2.06	4.4
3.95	2.39	5.1	2.08	4.45
4.	2.41	5.2	2.10	4.5
4.05	2.43	5.2	2.12	4.55
4.1	2.45	5.25	2.14	4.6
4.15	2.47	5.3	2.16	4.6
4.2	2.49	5.35	2.18	4.65
4.25	2.51	5.4	2.20	4.7
4.3	2.53	5.45	2.22	4.75
4.35	2.55	5.45	2.24	4.8
4.4	2.57	5.5	2.26	4.85
4.45	2.59	5.55	2.28	4.9
4.5	2.61	5.6	2.30	4.9
4.55	2.63	5.65	2.32	4.95
4.6	2.65	5.7	2.34	5.
4.65	2.67	5.7	2.36	5.05
4.7	2.69	5.75	2.38	5.1
4.75	2.71	5.8	2.40	5.15
4.8	2.73	5.85	2.42	5.2
4.85	2.75	5.9	2.44	5.2
4.9	2.77	5.95	2.46	5.25
4.95	2.79	6.	2.48	5.3
5.	2.81	6	2.50	5.35

APRIL SURPLUS PRICE
Country Receiving Stations

Test	Class I per 100 lb.	Test	Class II per 100 lb.
3.	$1.44	3.	$1.13
3.05	1.46	3.05	1.15
3.1	1.48	3.1	1.17
3.15	1.50	3.15	1.19
3.2	1.52	3.2	1.21
3.25	1.54	3.25	1.23
3.3	1.56	3.3	1.25
3.35	1.58	3.35	1.27
3.4	1.60	3.4	1.29
3.45	1.62	3.45	1.31
3.5	1.64	3.5	1.33
3.55	1.66	3.55	1.35
3.6	1.68	3.6	1.37
3.65	1.70	3.65	1.39
3.7	1.72	3.7	1.41
3.75	1.74	3.75	1.43
3.8	1.76	3.8	1.45
3.85	1.78	3.85	1.47
3.9	1.80	3.9	1.49
3.95	1.82	3.95	1.51
4.	1.84	4.	1.53
4.05	1.86	4.05	1.55
4.1	1.88	4.1	1.57
4.15	1.90	4.15	1.59
4.2	1.92	4.2	1.61
4.25	1.94	4.25	1.63
4.3	1.96	4.3	1.65
4.35	1.98	4.35	1.67
4.4	2.00	4.4	1.69
4.45	2.02	4.45	1.71
4.5	2.04	4.5	1.73
4.55	2.06	4.55	1.75
4.6	2.08	4.6	1.77
4.65	2.10	4.65	1.79
4.7	2.12	4.7	1.81
4.75	2.14	4.75	1.83
4.8	2.16	4.8	1.85
4.85	2.18	4.9	1.87
4.9	2.20	4.95	1.89
4.95	2.22	4.85	1.91
5.	2.24	5.	1.93

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK
F. O. B. Philadelphia and at receiving stations in the 50 mile one at 3% butterfat

1923	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
January	6.35	2.39
February	6.35	2.39
March	6.85	2.39
April	6.85	2.39
May	7.1	2.78
June	7.1	2.78
July	7.85	2.85
August	7.85	2.85
September	7.35	2.85
October 1-15	7.35	2.85
October 16-31	7.1	2.78
November	6.35	2.39
December	6.35	2.39
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations

1923	Average per month Class I	Class II
January	$2.49	$2.07
February	2.36	1.97
March	2.37	1.98
April	2.24	1.86
May	2.02	1.68
June	1.86	1.56
July	1.86	——
August	2.08	——
September	2.19	——
1924		
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53

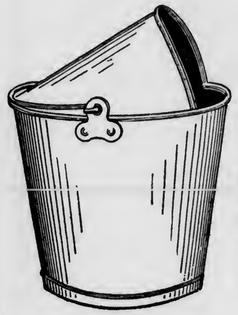
MAY PRICES
F. O. B. PHILADELPHIA
County Stations

The same prices for basic milk as quoted above under April apply in May, subject, however, to change whenever warranted by market conditions.

APRIL BUTTER PRICES
92 Score Solid Packed

	Philadelphia	New York	Chicago
1	42	42	39 1/2
2	41 1/2	42	39 1/2
3	42	42	40
4	42	42	40
5	41	40	39 1/2
7	41	40 1/2	38 1/2
8	41	40	38
9	40	39	37
10	38 1/2	38 1/2	37
11	39	38 1/2	37
12	39	38 1/2	37
14	39	38 1/2	37
15	38 1/2	38	37
16	37	36 1/2	36 1/2
17	36 1/2	35 1/2	35
18	37 1/2	36 1/2	35 1/2
19	37 1/2	36 1/2	35 1/2
21	37 1/2	36 1/2	35 1/2
22	38 1/2	37 1/2	36
23	39 1/2	38 1/2	37
24	39	38 1/2	38
25	37 1/2	37	37
26	37 1/2	37	36 1/2
28	37 1/2	37	36
29	37 1/2	37	35 1/2
30	37 1/2	37	35 1/2

New Milk Regulations Make Small Mouth Milk Pails Necessary



SANITARY HOOD PAIL

made in accordance with Health Department design of "ANTI-RUST" heavy dairy tin. All seams double soldered leaving no crevices for milk to collect in. Large enough opening to milk into, yet so constructed as to keep out falling dust and dirt.

PRICES	Each	
10 quart Anti-Rust Hood Pail	$1.40	Add ten cents each for Parcel Post
12 quart " " " "	1.50	
14 quart " " " "	1.60	

E. A. KAESTNER

516-524 N. Calvert St. Baltimore, Md.

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"THE DAIRY SUPPLY HOUSE"

IT PAYS to Own One

Because it lasts many years longer—costs less per year—*keeps silage better*—than any ordinary stave silo. *Proved by experience wherever used.*

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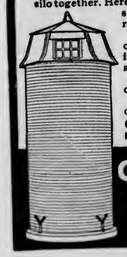
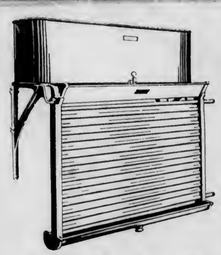
Special discounts on early orders.

Time payments if desired.

Craine Silo Co.
Box 230 Norwich, N.Y.



CRAINE TRIPLE WALL SILOS



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CHESTER DAIRY SUPPLY COMPANY
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MILK FOR HEALTH

MUTILATED PAGE

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NO MATTER what kind of water supply you have, we have the right Farm Milk Cooler to suit. Either gravity or pressure type. If you don't have running water, our Siphon system or our Circulating Pump will solve your problem. For fifty years we have been manufacturing high grade dairy equipment. **We'll show you how to keep your milk from 24 to 48 hours longer**, and we won't need to experiment at your expense. Our coolers are rust-proof and wear-proof. They are easily cleaned, for they have no corners. Prices range from $31.50 to $75.00 according to type and size. **A guarantee of complete satisfaction goes with each cooler. Tell us about your water supply, and we'll tell you how to get satisfactory results.**

Ask for free descriptive circular No. 12

A. H. Reid Creamery & Dairy Supply Co.

69th St. & Haverford Philadelphia, Pa.

HAVE YOU YOUR TEMPORARY PERMIT?

Milk Producers and Distributors Must Have Temporary Permits by May 31st, 1924

(Continued from page 1)

culture, four years. Came to Dairy Council direct from college.

ROBERT DWYER
Pennsylvania State College, two years in Agriculture. Raised on dairy farm in northern Pennsylvania. Two years in cow testing association work.

HENRY WEAVER
Maryland University, two years in Agriculture. Raised at Greensboro, Md., on dairy farm. Operated farm for three years in Maryland.

WESLEY HOLMES
Pennsylvania State College, two years in Agriculture. Raised in Pittsburgh, Pa. Worked on farm four years. Employed in milk distributing plant in Pittsburgh one year.

C. A. WILSON
University of Wisconsin, two years in Agriculture. Raised on dairy farm in Wisconsin. Formerly with Certified Dairy in Minnesota.

J. O. EASTLACK
Cornell University, four years in Agriculture. Raised on dairy farm near Woodbury, N. J. Formerly with Walker Gordon Certified Dairy.

Dealers Cooperation

There have been a number of rumors floating around in various parts of the territory to the effect that there was some doubt whether all of the large buyers, particularly in Philadelphia, were going to co-operate in these new regulations. It has also been stated that there would not be strict enforcement of the regulation that temporary permits must be in the farmers' hands by June first.

Both statements are without foundation and not in accordance with the facts. All of the large buyers, particularly in Philadelphia, who have been co-operating with the Inter-State Milk Producers' Association and the Philadelphia Inter-State Dairy Council are heartily in favor of and are co-operating in the sanitary regulations. It will be necessary for every farmer to make application for a temporary permit in sufficient time to have it in his possession by June first, except in instances where the decision of the dealer to co-operate came at a rather later date, where special arrangement has been made to have this date extended. In all such exceptional cases the farmers themselves will have proper notice sent them direct.

All buyers have been sent notices which they have been asked to post at all receiving stations to the effect that temporary permits must be obtained by shippers of milk by June first. Also a large number of direct shipping producers have received notice to the same effect. Lists are being prepared covering all of the producers who have applied for and recieved a Temporary Permit before May first. These lists will be furnished the dealers so that they can post them in the receiving stations or otherwise notify all of their patrons as to who have and have not obtained the necessary permits. There will undoubtedly be such a tremendous rush to get permits at the last moment that the office force of the Quality Control Department may be temporarily unable to keep up with the applications as received daily. Do not put off sending in your questionnaire if you have not already done so.

Field Meetings

There has been an effort made to reach as many districts as possible at meetings at which these sanitary regulations can be explained to our farmers. These meetings aggregate a total of 98 with a total attendence of 6646 farmers and the spirit shown by milk producers has been most gratifying. A number of questions have come up at all such meetings and among them are:

(1) Whether or not it is necessary to concrete the floors and gutters or if they can be constructed of wood or other suitable material.

(Answer) We interpret the regulations to the effect that either one log placed immediately back of the cows to provide a drop, or a tight gutter constructed of planks, though temporary, will meet the requirements if kept in a sanitary condition.

(2) Tying Cows: Some farmers feel in a great many territories that they must provide steel stanchions.

(Answer) We would say that either tying the cows by chains, wooden jacks, wooden or steel stanchions, are satisfactory and will meet the regulations. On the other hand, if the cattle are kept in a large enclosed shed or box stall and allowed to run loose this will be acceptable under the regulations, provided the floor is kept clean and well bedded.

(3) There has been some inquiry with regard to the requirements for ceilings. Some producers understand that they would be required to place a tight ceiling on the under side of the rafters or joists of the cow stable.

(Answer) The regulations require only a tight ceiling over the cows and this tight ceiling may consist of the floor overhead. Either barn floor or mow floor which can be so constructed as to make the cracks as small as possible, not necessarily tongue and groove boards, but simply straight edge boards placed closely together. In the event that there is no partition over the cows, but just a roof, this will be acceptable. Where the mow overhead contains hay which cannot be conveniently moved at this time, the producer is allowed ample time to either feed off this hay or to remove it when convenient and repair his ceiling, but it must be repaired before new hay is placed in the mow.

Occasionally renters have ceilings which will not meet the regulations. When their landlord will not co-operate to put in a satisfactory ceiling, they can meet the regulations by putting up heavy building paper or roofing paper on the under side of the joists, securing it with strips in such a way as to make a tight, sanitary ceiling.

Light and Ventilation

Care should be exercised in putting in additional windows to meet these important requirements and that they shall be so arranged to give the best possible distribution of light and ventilation. Single sash windows hinged at the bottom give the best ventilation.

Barnyard

At all meetings the farmers are urged to take the opportunity to fill up holes and grade the barnyard at this time of year when they are hauling manure to the fields, and arrange for the proper drainage of rain water so it will not accumulate in the barnyard. During the

(Continued on page 9)

INOCULATING LEGUMES

Millions of dollars worth of nitrogen is floating around through the air, free for the asking for fertilizing purposes. Bacteria are small forms of plant life which are willing to work without pay in order to collect this nitrogen from the air and store it in small nodules on the roots of leguminous plants. See to it that legumninous seeds such as alfalfa, sweet clover and soy beans are inoculated with the proper type of bacteria. These legume cultures may be secured from any reliable seed house or from the bacteriology division of the Dairy Department at your State College.

Give the little chicks milk, and plenty of it.

GLEANINGS FROM THE FIELD

HARRINGTON LOCAL INCREASES MEMBERSHIP

With the active co-operation of the officers and members of the Harrington, Delaware, local of the Inter-State Milk Producers Association a drive for new members was carried on there recently. In the neighborhood of 60 producers added their support to the organization for a total of approximately 300 cows. This addition to its membership places the Harrington branch on a par with the thriving Delaware locals to the credit of that section. Farmers from two counties, Kent and Sussex, were among those joining.

This territory is largely a truck locality and dairy herds are small, averaging five cows. It is a matter of great satisfaction, then, to find, in the main, an understanding of dairy marketing problems and a willingness to work out those problems through co-operative effort. We find the dairymen who are responding to the co-operative call in the majority.

Other Membership Work

The rainy weather which has held back concentrated membership drives so noticeably during March continued into April and made an organized drive which had been planned at Chestertown, Md., impossible. In order that we might dodge the bad roads as much as possible the time was distributed between the Hurlock, Md. section and the territory near Newark, Delaware.

In these two sections about 36 new members were obtained for a total of approximately 225 cows. The Hurlock section, as a result of this and previous work now stands as one of the best organized territories in the entire Philadelphia Milk Shed.

Membership records for the three months, January, February and March, were respectively as follows, 149, 109, and 99.

SILAGE DECREASES THE COST OF MILK

E. S. Savage

(Continued from page 3)

ducers with a little corn meal mixed with no other feeds.

This shows what a tremendous saving in the cost of milk production in the East could be made if our farmers would all equip themselves with silage. Put as much of their land into the production of legume hay as possible and then feed the maximum amount of silage and legume hay coupled with a good grain mixture feed in a reasonable amount.

Maximum milk production demands a succulent feed in the ration in the winter time. The cheapest and simplest way to obtain this succulence is to grow silage. The concentrates which can be mixed with water to provide succulence in the grain ration are being used up more and more as constituents of ready mixed feeds and are thus going off the market except at a high price and then they cannot be depended upon from year to year in any case.

Uncle Ab says not to worry about being beaten today for the sake of a cause that will be accepted as right tomorrow.

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK — FROM COW TO CONSUMER

Headquarters for Farm COOLERS

You will need a cooler during the coming hot months; the recent rulings call for milk chilled on the farm.

To aid you in the selection of an efficient, economical cooler, write for a bulletin describing and pricing the line of Bestov Tubular Farm Coolers. They are made of tinned copper and bronze and will cool milk summer after summer without needing repairs or wearing out. Cold water, ice water or brine is used to circulate through the tubes and the milk is aerated as it flows over the tube surfaces in a thin sheet.

Send for the Bestov Cooler Bulletin before buying!

CHAMPION FARM COOLER
For the dairyman who wants a simple efficient cheap cooler and aerator. Made in 3 sizes. Easy to use. Write or phone for prices.

Bestov Farm Coolers are guaranteed not to leak; they will stand a pressure of 150 lbs. Other tubular coolers do not measure up to this standard.

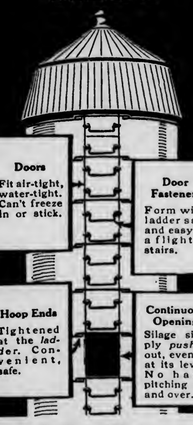
Bell Phone Locust 1018

Cherry-Bassett-Winner Company

1918 Market Street, PHILADELPHIA

Next to Stanley Theatre

UNADILLA SILOS



4 of the Reasons

why you'll find more Unadilla Silos sold today in the East than any two others. The Unadilla saves much of your time; is convenient, safe and easy to use; keeps silage good to the last forkful; is a tower of strength and a complete satisfaction to its owner.

Send for catalog fully describing all the Unadilla features and advantages. You can get your Unadilla on easy terms. Early orders earn a real saving in handsome discounts.

UNADILLA SILO COMPANY
Box D Unadilla, N. Y.

Farmers Now Make More Money from Milk

What they have learned is:

1st—To get away from hand milking—saving time and labor—often saving the wages of one or two men.
2nd—To distingulsh between the Empire and all other milking machines.
3rd—That the Empire is the only machine fully duplicating the action of the calf. Massaging the teat after each suck.

Look how other men are getting real profits out of dairying.

Edward W. Bennett, Cornwall Bridge, Conn.—"Once when we milked by hand the 25 cows dropped 25 quarts to a milking. Would never go back to hand milking. Would go out of business first."

E. G. Fenner, Little Falls, N.Y.—"Milk 16 cows. Get along with one less hand."

G. W. Spencer, Kelton, Pa.—"The Empire takes the place of about one man."

Frank T. Irwin, Rosemary Farms, Gibsonia, Pa.—"Empire more sanitary than hand milking. Saves one hand. Wouldn't keep a dairy without an Empire."

Settle this now. It's the Empire that makes the difference—more milk each time—more days of milk—cleaner milk—less wages to pay—less hard labor for the farmer—*bigger profits.* It is because the Empire is the one patented milker giving a perfect three-sided massage of the teat *from tip to udder.* Duplicates the action of the calf. Nature's way. The cow likes it—stands quieter, stays in better condition.

Farmers everywhere are using Empires to turn dairy losses into dairy profits. Send for booklet, "How to Milk for Bigger Profits." Just fill out the coupon below.

H. E. McWhinney, President
EMPIRE MILKING MACHINE CO.
Bloomfield, New Jersey
Sales and Service Branches
Elgin, Ill.; San Francisco, Cal.; Denver, Col.; Ottawa, Ont., Canada

EMPIRE Milking Machines

Empire Advantages

1. Teat cup lining is hand made and has linen inserts. Under Empire patents cover these features—they give the only complete three-sided massage, duplicating the calf's suck.
2. Single or double units to meet your requirements.
3. Durable rubber parts that stand boiling.
4. Single pipe line with no complicated or moving parts to wear and get out of order. Clean. Costs less.
5. The Single Pulsator guaranteed 4 years against wear. Only one Pulsator needed for a single or double unit.
6. Low power cost. ½ H. P. Motor operates 4 double units, milking 8 cows at a time.
7. Sanitary claw with automatic shut-off and without moving parts to wear and get out of adjustment.

The Machine to Meet Every Dairyman's Requirements.

COUPON—TEAR OFF HERE

Empire Milking Machine Co.
Bloomfield, N. J. (16)

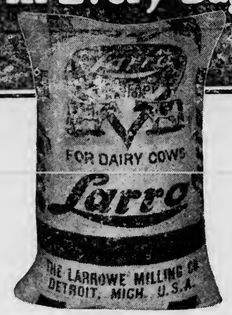
Dear Sirs: Without any obligation on my part, please send me a copy of your free booklet, "How to Milk for Bigger Profits." Yours,

Name.....

R.F.D.....

Post Office.....State.....

There's 4-Way Safety in Every Bag



Safe—because Larro has just the right amount of protein from the right sources. More is often dangerous. Less is often not enough.

Safe—because the quantity and high quality of each ingredient absolutely do not change. No variations to throw cows off feed. Larro-fed cows are always in the best of health.

Safe—because a powerful electro-magnet prevents tramp iron and steel from getting into finished Larro. Absolutely no nails, wire, needles or junk in Larro.

Safe—because it is free from adulteration and fillers. It contains nothing but clean, wholesome, milk-making, profit-making ingredients.

The Larrowe Milling Company, Detroit, Mich.

TRADE MARK NICE REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY

PAINTS AND VARNISHES

Write for Color Cards and Booklet "Paint Pointers"

EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

FORD CAR GIVEN

Free of Cost

Solve This Puzzle—Win 5000 Votes

23	9	14	6	15	18	4	3	1	18

What words do these numbers make? The numbers in the squares represent letters of the alphabet. Figure 1 is A, 2 is B and so on. The ten figures spell three words. What are the words. Full particulars with 5000 Votes toward Ford Car and other Grand Prizes will be sent as soon as your solution is received.

Thousands of Dollars in Prizes and Cash Rewards

I am going to give away a new Ford Touring Car, also many Grand Prizes and Cash Rewards, Bicycles, Phonographs, Gold Watches, Diamond Rings, Silverware, etc., etc., to those who are prompt and energetic in following my instructions in my contest for more readers which closes Sept. 12, 1924. Leader gets Ford Car. All who take part rewarded. Get your share of these Prizes and Cash. Prizes duplicated in case of tie. Send no money. Just a postcard or a letter with your name, address and puzzle solution. Don't let anyone beat you to it. Send your puzzle solution and address QUICK.

DUANE W. GAYLORD, 537 S. Dearborn St., Dept. 80., Chicago

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE

PRINTER

BELL PHONE No. 1 WEST CHESTER, PA.

Advertisers will appreciate your mention of the Milk Producers Review when answering advertisements.

SIMPLE DESSERTS

Desserts have their place in the diet, to be sure, but often times they have too prominent a place in the American diet. They should be treated as delicacies, merely to add the finishing touches to a meal. Our best medical authorities tell us each child should have at least one quart of milk a day. By making simple milk desserts we can use milk in most attractive ways.

Many desserts require eggs and sugar also, and the spring is the season to make milk and egg desserts. It is so important to give children very simple easily made and readily digested desserts. If a very heavy meal is served, it is best to serve a fruit or a very simple milk dessert. Sweet foods upset the stomach if eaten in too large quantities. The desserts listed below are especially recommended as "Health Desserts" for your little folks:

Custard

1 qt. milk
4 eggs
½ cup sugar
½ t. vanilla or nutmeg
¼ t. salt

Scald the milk (use double boiler, if possible). Beat the eggs slightly, add sugar and salt. Gradually add the hot milk, stirring constantly. *Pour hot milk on the egg.* Cook either of the following ways:

I. *Soft Custard:* Return the mixture to the double boiler. Stir constantly until the mixture thickens. A custard is done when it coats the spoon. Remove from the fire and cook quickly. This may be used in many ways:
(1) With stale cake, as a sauce
(2) With fruit
(3) With cocoanut added
(4) With pudding, as a sauce

II. *Baked Custard:* Pour the mixture into greased custard cups or a baking dish. Sprinkle with nutmeg. Set in a pan of warm water and bake in a *slow* oven. Test with a knife blade—when blade comes out clean remove from the oven.
(1) Custard may be sprinkled with nuts before baking to vary.
(2) The sugar may be caramelized by putting it into a pan and stirring constantly until it is a light brown color. Add the milk and heat until the sugar is dissolved. Add to the eggs slowly—this makes a caramel custard.

Junket

3 cups milk
½ cup sugar
1 junket tablet
1 tablespoonful water
1 teaspoonful vanilla

Crush and dissolve the junket tablet in cold water. Heat the milk and sugar until it is just *luke warm.* (*OVERHEATING OF MILK SPOILS JUNKET.*) Add the vanilla and junket tablet. Pour immediately into serving dishes or cups and let stand in a warm room until firm. Then chill. Season with nutmeg or chocolate (cocoa paste 1 tbsp. to c. of milk), if vanilla is not desired. Serve plain or with fruit or nuts.

Chocolate Cornstarch Pudding

2 c. milk
6 t. cornstarch
½ c. sugar
1½ squares melted chocolate
½ t. vanilla
¼ t. salt

Mix dry ingredients, make into thin, smooth paste with a little milk. Add to heated milk in top of double boiler. Add melted chocolate. Stir to prevent lumps. Cook twenty minutes. Add vanilla and pour into moulds rinsed in cold water. Chill, serve with cream or whipped cream.

Orange Cream

4 t. cornstarch
½ c. cold milk
3½ c. scalded milk
Yolks two eggs
½ c. sugar
½ t. salt
½ t. orange extract
Fresh oranges

Mix cornstarch with cold milk, add gradually to scalded milk and cook in a double boiler fifteen minutes, stirring constantly until mixture thickens and afterwards occasionally. Beat yolks of eggs and add sugar and salt. Add to first mixture and cook about three minutes. Turn into a serving dish, sprinkle with two t. granuated sugar, cover and let stand until cold. Cover with a meringue and surround with a border of sections of orange. Serve with cream. For the meringue beat the whites of two eggs until stiff, and add gradually, while beating constantly, 2 t. powdered sugar, ½ t. vanilla and a few grains of salt.

Bread Pudding

Into a well-buttered baking dish put layers of buttered slices of stale bread, sprinkled over with raisins. Cover with custard mixture made as follows: To 2 slightly beaten eggs add 4 t. sugar and ¼ t. salt; ½ t. vanilla, mix with 2 c. milk. Set dish in pan of hot water. Bake in a moderate oven until custard is firm and well browned.

Queen's Bread Pudding

After taking bread pudding from oven, spread over top tart jelly, preserves or sauce (this may be left-over material). Pile evenly on top a meringue made of a stifly beaten egg white with 3 t. sugar. Brown in a moderate oven. The extra egg yolk may be put in the custard mixture.

Poor Man's Pudding

6 c. whole milk
½ c. rice
½ c. sugar
1 t. salt
½ t. nutmeg
½ c. raisins

Put altogether in a buttered pan in a moderate oven. Stir frequently at first and then occasionally. Bake two hours. Should be creamy. Better cold than hot.

Baked Rice-Raisin Pudding

To 1½ c. cooked rice (1/3 c. rice cooked in 3 c. boiling water), add a custard mixture made as follows: White of 1 egg and yolks of 2 eggs, ¼ c. sugar, ½ t. salt. Mix together and add 2 c. milk. Pour over rice, mix with ½ c. raisins. Bake in well buttered dish. Set in a pan of hot water in a moderate oven. Bake until well browned and firm. Remove from oven, cover with a meringue, irregularly piled, made as follows: Whites of 2 eggs stifly beaten, add 4 t. sugar. Bake in moderate oven until delicately brown.

HAVE YOU YOUR TEMPORARY PERMIT?

Milk Producers and Distributors Must Have Temporary Permit by May 24th, 1924

(Continued from page 6)

summer season arrangements can best be made for the storage of manure as outlined in the requirements.

Whitewash

Where whitewashing is necessary, the first available day should be utilized for its application. In cases where whitewash has been found unsatisfactory, we would recommend the use of Government whitewash, formulas for which have been given in recent issues of the Review. This has been found to be a very permanent and sanitary form of whitewash.

Milk Houses

Where a man is planning a new milk house or an adaption of an old building for this purpose or the use of the spring house as a milk house, we would, in all cases, urge (1) whitewashing inside at least twice yearly, (2) provision of a sufficient volume of cold water, preferably running or circulating, for cooling, (3) a floor which can be cleaned and well drained at all times, (4) can rack either inside or out, according to the surrounding conditions. If the milk house is necessarily located near the barn, so that the can rack may be near contaminating surroundings, we would advocate placing the can rack inside. On the other hand, if it can be placed outside without sacrificing the sanitation, it is permissible to do so. (5) All windows and doors must be carefully screened to keep flies and other insects out and also in the case of spring houses which are partly underground, the windows need special protection to keep the dust and dirt from blowing in.

Cans and other utensils must not be inverted over stakes or posts. Milk must be protected from sun and dirt while in transit to receiving station or platform. In case of truck routes every producer should load from a platform on which the milk can be protected while waiting for the truck. Trucks must be supplied with covers for the protection of all the cans in transit, and it is the duty of every producer to insist that the truck hauling his milk be provided with a cover.

Receiving Station Requirements

Receiving stations must also conform to sanitary regulations and they are being inspected. They are installing can washers as rapidly as possible so as to meet with the requirements.

In all cases where changes in the arrangement must be made to keep out sources of contamination and to otherwise keep them entirely sanitary, these are being suggested and alterations made, and the requirements for their sanitary operation will be strictly enforced.

CONCRETE WORK

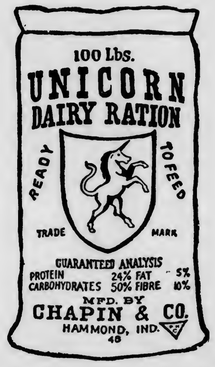
When a concrete walk or floor is laid, cover it with dirt or manure and keep it moist several days. This prevents rapid evaporation of water and results in a better piece of work. Use a wood float instead of a steel trowel to smooth down the concrete surface. A steel trowel makes the surface too smooth and slippery.

It's too much to expect good calves from poor mothers, but a pure bred sire will help.

Why William Joy Feeds UNICORN

THE mixed feed that makes milk at lowest cost is Unicorn Dairy Ration. Every day, from Wisconsin to Maine, we get letters from prosperous, practical Unicorn feeders who send us figures which prove this fact.

Take the interesting figures we have received from two farms located in Livingston County, New York, owned by William Joy and Clarence Price, friends and neighbors.



Clarence Price, from his 25 cows, is getting 720 lbs. of milk daily from 150 lbs. of feed—three-fourths Unicorn and one-fourth home-grown grains. He is producing 100 lbs. of milk at a grain cost of 49 cents.

William Joy was feeding his 8 cows a mixture of oil-meal and home-grown grains costing him 87 cents to make 100 lbs. of milk. Two weeks ago, Mr. Joy discovered that Mr. Price was making milk for 38 cents per 100 less than he was. He is now feeding Unicorn.

87c
49c
38c

Unicorn will reduce YOUR cost of making milk—no matter what grain mixture you are now feeding. You can prove the truth of this statement to your own greater profit, by buying a few bags of Unicorn and feeding it to your cows.

More Profit Every Day—For More Days

CHAPIN & COMPANY

327 South La Salle Street CHICAGO, ILLINOIS

LABOR SITUATION IN PENNSYLVANIA AND NEW JERSEY

Reports received from the Departments of Agriculture of both Pennsylvania and New Jersey give us some idea of the farm labor situation at this time.

In Pennsylvania the farm labor supply was reported as 79 per cent. of normal on April first and the demand 89 per cent. normal, indicating a shortage which is believed will become more acute as road work opens in the agricultural districts.

Average wages paid by farmers were reported to be $39.50 per month with board and $59 without board.

The April first crop report from New Jersey estimated that the present average prices of farm labor are as follows. Monthly with board $46; without board $71; day's wages with board $2.65; day's labor without board $3.65. These figures show a slight increase over those of a month ago.

The labor supply and demand is estimated as 76 per cent. of normal.

Leaving the stable manure exposed in the barnyard is one way some farmers have of throwing away money.

TESTING MEMBERS MILK

The field work of the testing forces of the Inter-State Milk Producers Association, now being tabulated in monthly form, enables us to give our readers an outline of a months work in the field.

Visits to receiving stations are so timed that two tests, first and second halves of each month are made. This gives the shipper of milk a full test of his monthly average sample as a comparison against the butter fat tests made by the buyer of milk.

A brief summary of the work done by the various testers is tabulated herewith.

Tester	1	2	3	4	5	6	7	8	9
Number of days testing	13	9	11	15	14	24	16	15	10
Number of tests made	714	276	305	602	565	1473	166	586	543
Average per day	55	37		41	40	53	14	39	57
Personal visits to farmers	125			11				31	
Number meetings attended	1			2					

COW TESTING ASSOCIATIONS

Harry Ross, tester.

The report of the York Valley Cow Testing Association for the month of April shows that twenty-four herds were tested. Two hundred and ninety-seven cows were in milk. Fifteen cows were on official test. There were thirty-seven cows producing over 40 and thirty cows over 50 pounds of milk. Forty-seven produced over 1000 and forty-seven over 1200 pounds of milk.

The highest herd average test was that of John L. May's, Guernseys, with a test of 5.3 fat. The highest average for milk and fat production was that of the herd of J. S. Brandt, 1244 pounds of milk and 48.4 pounds butterfat.

The ten highest producing cows in butterfat for the month are as follows:

Owner	Name	Breed	Lbs. Milk	% Fat	Lbs. Butterfat
J. S. Murphy	Vale	R. Hol.	2715	3.4	92.3
Geo. Livingston	Betz	G. Hol.	2446	3.5	85.6
J. S. Brandt	Malinda	G. Hol.	2031	4.0	81.2
J. S. Brandt	Pet	G. Hol.	2022	3.4	68.7
C. E. Etnier	Molly	R. Hol.	2117	3.2	67.7
E. J. Meyers	Siss	G. Hol.	1876	3.6	67.5
H. E. Robertson	Finderne	R. Hol.	1899	3.5	66.5
C. E. Etnier	Laura	R. Hol.	2155	3.0	64.7
J. S. Brandt	Bell	G. Hol.	1980	3.2	63.4
J. S. Murphy	Segis	R. Hol.	1977	3.2	63.3

MUTILATED PAGE

Quality Wins Out

Facts Worth Reading!

Philadelphia, Pa., April 28, 1924.

Dear Sir:

The act of returning the farmer's Feed Pool NOTE marked the closing of our 1923-24 Feed Pool. Thirty-eight hundred (3800) Farmers and Dairymen took part in this Pool. They purchased a total of twenty-five thousand two hundred (25,200) tons of feed.

The closing of this, our first Feed Pool, marks the passing of the first mile-stone of progress made by ORGANIZED DAIRYMEN in purchasing at wholesale prices, **Open Formula Dairy** and **Poultry Feeds.** It is fine to learn from so many farmers the good results this feed has given. Many farmers tell us they got not only more milk than when feeding other feeds, of unknown digestability, but that their cattle came through the winter in better flesh and gave birth to healthier calves. This is no surprise, when we remember that these feed mixtures were carefully worked out and approved by the expert feeding authorities of (13) Eastern Agricultural Colleges.

100 lbs. (net)
P. F. C. F. 24% Milk Maker

Guaranteed Analysis
Protein (minimum) 24.00%
Fat.. (minimum) 5.00%
Carbohydr. (Min.) 45.00%
Fibre (maximum) 9.00%

Digestible Nutrients
1506 lbs. per ton
200 lbs.—Corn Dis. Grains
240 lbs.—OilMeal (OldProc)
500 lbs.—Gluten Feed
200 lbs.—Wheat Bran
260 lbs.—Cottons'd Meal, 43%
100 lbs.—Wheat Middlings
100 lbs.—Peanut Oil Meal, 40%
100 lbs.—Ground Oats
160 lbs.—Yellow Hominy
100 lbs.—Molasses (cane)
20 lbs.—Salt
20 lbs.—Cal. Carbonate
2000 lbs.—P.F.C.F.Milk Maker.

Manufactured for Penna. Farmers' Co-operative Federation, Inc. Philadelphia, Pa.

We have heard also the other side of the story. The opposition has undoubtedly told you, as they have told others, that your NOTE would never be returned to you—that the confidence you had placed in the Co-operative Movement would be abused—that the quality of the feed you purchased would be inferior—and most of all, you have been told the price you paid was too high.

NOW ISN'T THIS THE TRUE STORY! The note has been returned, which destroys both the claim that you would not get it back unblemished, and that the credit you had loaned your own Co-operative Association would be abused. The statement that the feed would be of inferior quality—your cows answered. You are also ready to say that you never fed as good feed. As to the price being too high, "A PRICE SURVEY" enclosed shows you conclusively that if there had been no Pool, Farmers would have paid $4.00 to $6.00 per ton more for feeds of far less milk producing power than P. F. C. F. Milk Maker.

Two things must be remembered. FIRST—THINK OF IT! Each time you add to the quality of any Dairy Feed, just enough more quality to increase Milk production one pint (pound) more milk per cow, per day, you increase the feeding value of the feed $6.00 per ton. Figure it for yourself—one pound of milk per day for 300 days @ $2.00 per cwt., equals $6.00. Hundreds of dairymen feeding P. F. C. F. Milk Maker do not hesitate to tell us their cows drop off as much as 2 to 3 pounds per day when they change to feeds of unknown quality and unknown digestible nutrients.

SECOND—DO NOT FORGET! That no worse year could have been selected for starting our first Feed Pool. To the sorrow of us, milk prices went down, at a time when in normal years milk prices go up. This, coupled with the Open Winter Weather, held back the usual winter advance in feed prices. In spite of all these things, and combined with them, is the fact that many feed dealers cut out their profits entirely, while many others reduced their profits considerably. Still, in spite of all of this, P. F. C. F. MILK MAKER bought in the Pool at fall prices proved a good buy throughout the winter.

We have saved you money in the form of more milk produced, and also in actual cash you have paid for feed. Our opposition has held down their prices to make our savings look smaller to you than they actually were. We gave you a good quality feed—we returned your note—we fulfilled our part of the contract. We must improve our shipping service—we will improve it. We must buy earlier—we will buy earlier. We know your continued co-operation with us will affect still greater savings, and thanking you in anticipation of your continued co-operation, we are,

Very truly yours,

J. M. Rosenberger
Sec. Treas

(Copy of recent letter sent to Pool Buyers)

Pennsylvania Farmers' Co-operative Federation, Inc.

Offices: Heed Building Philadelphia, Penna.

A Co-operative Purchasing Association *Buying Quality Supplies for Farmers*

DAYLIGHT SAVING WITH US AGAIN

Notwithstanding the passage of a state law by the last Pennsylvania legislature, signed by Governor Pinchot, through the efforts of law abiding citizens and farmers throughout the Commonwealth, aided by many organizations, including physicians and educators, daylight saving practices continue in Pennsylvania to the confusion of the travelling public, and the great loss and inconvenience of our country people.

Standard time is the legal standard of time for the Commonwealth of Pennsylvania.

Many cities, towns and communities, however, have found a way of "beating around the stump."

It does not appear necessary to pass city ordinances, apparently inoffensive resolutions do the trick. Just resolve what you want, no matter what the law may be, and you will have covered a multitude of sins.

For the convenience of a few golf players, twilight base ball game fans, tennis players and other outdoor sports, the purpose and intent of the law is set aside.

The moral effect of such evasions of the law, countenanced by city officials, local civic bodies, etc., lead us to ask—"Why the Law?"

The present Standard Time Law in the Commonwealth of Pennsylvania "lacks teeth."

The proponents of the bill, believed that the public would abide by the law. Such has not been the case.

The purpose and intent of the standard time law was clear, but the sporting public, in the main, has had their fling, notwithstanding the wishes and desires of the great mass of public opinion, including thousands of working people residing in the large cities. Their efforts have, apparently, misguided public officials in the enactment of "regulations" that are clearly not the will of the great mass of people in the Commonwealth.

To be effective, the law must have teeth: Apparently it seems necessary to tax a man's pocket-book or punish violators in some way, so that the law must be obeyed.

Law breakers must be punished, whether it be in violation of standard time laws, or any other law. If resolutions are to be the enforcing mediums of our laws, its time to make a change.

Law abiding citizens cannot help but censor authorities, civic bodies and organizations, as well as individuals who habitually and openly violate the spirit and letter of the laws of the State.

PENNSYLVANIA JERSEY MAKES GOOD SENIOR THREE-YEAR-OLD RECORD

By producing 14,292 pounds milk, 639.05 pounds butter-fat as a Junior three-year-old, Prince's Rose of M. B. 470872 becomes the champion of her class for Pennsylvania. She exceeds the record of Laurel's Liberty 430687 who formerly was champion of this class with a production of 634.01 pounds butter-fat.

Of course, Mr. W. F. Shrum of Jeannette, Pennsylvania, is very proud of this high producer. Her record was made on two milkings a day, and during the test she carried a living calf for over seven months. In December Rose produced the greatest amount of milk, which was over three quarters of a ton. In March her butter-fat production almost reached the seventy-pound mark.

Her sire is Saucon's Golden Prince 142483 who already has twenty-four tested daughters. Her dam is Rex Blacky 2d 253095.

INTERNATIONAL
A Feed For Every Need

Dairymen everywhere know that every sack of International Special Dairy Feed is guaranteed to give 20 extra quarts of milk when compared with wheat feeds or ground grains. But not everyone knows that International has a feed for every need—a brand that matches Special Dairy for quality.

Int'l Special Dairy Feed makes more milk at less cost than any other feed.

Int'l Calf Meal will raise three calves at cost of raising one on new milk.

Int'l Pig Meal—One pound equals in feeding value one pound of fresh milk.

Int'l Egg Mash when fed with grain will often double egg production.

Int'l Buttermilk Chick Mash when used first ten weeks will insure quick and satisfactory growth and prevent usual heavy death loss during this period.

Int'l Growing Mash—Begin using at age 10 weeks. This will insure steady growth and sturdy body.

Dan Patch Horse Feed.

Int'l Chick Feed, Int'l Growing Feed and Int'l Poultry Feed will provide proper grain ration as indicated.

Int'l Climax Cattle Feed—This feed has caused cattle to double in weight and double in price inside five months.

Int'l Sugared Hog Feed with Mineral contains 3% mineral mixture made from following formula advocated by Iowa Agricultural Experiment Station: One part Salt, two parts Calcium Carbonate, two parts Bone Meal or Spent Bone Black. Follow our feeding directions and your hogs will be supplied with the necessary and vitally important mineral in required amount. Every sack International Sugared Hog Feed will save 6 to 7 bushels corn.

DAIRYMEN! HOG AND CATTLE RAISERS! POULTRY RAISERS! International Feeds bring you increased profits. See your dealer today. If he cannot supply you, write us.

International Sugar Feed Co.
Minneapolis, Minn.
Live Agents Wanted

Willard
Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA COATESVILLE, PA.

FARM LOANS

Plan which Saves Money and Gives Security and Stability to the Farmer

For Circular, write to

Pennsylvania - Maryland Joint Stock Land Bank OF HARRISBURG

FRED RASMUSSEN, President

Operated Under Federal Farm Loan Act

E. NEWLIN BROWN
Live Stock Auctioneer
WYCOMBE, BUCKS CO., PA.
Sales Anywhere —Anytime

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GREEN MOUNTAIN SILOS

Statement of the ownership, management, circulation, etc., required by the Act of August 24, 1912, of Inter-State Milk Producers Review, published monthly at West Chester, Pa.

Editor, August A. Miller, Brookline, Delaware county, Pa.; Managing Editor, F. P. Willits, Ward, Pa., Delaware county; Business Manager, August A. Miller, Brookline, Delaware county, Pa.; Publisher, Inter-State Milk Producers Association, Philadelphia, Pa.

Owners: (If a corporation, give its name and the names and addresses of stockholders holding 1 per cent. or more of total amount of stock. If not a corporation, give names and addresses of individual owners). Inter-State Milk Producers Association, H. D. Allebach, Trappe, Pa.; F. P. Willits, Ward, Pa.; F. Shangle, Trenton, N. J.; A. B. Waddington, Woodstown, N. J.; E. Nelson James, Rising Sun, Md.; R. W. Balderston, Media, Pa., and 18,500 others.

Known bond holders, mortgagees and other security holders, holding 1 per cent. or more of total amount of bonds, mortgages, or other securities: (If there are none, so state.) None.

Average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above. (This information is required from daily newspapers only.)

AUGUST A. MILLER

Sworn to and subscribed before me this 17th day of April, 1924.
W. H. Henderson
Notary Public
My commission expires March 27, 1927.

"What Fools These Mortals Be"

UTILIZING DAYLIGHT

From the Evening Public Ledger, Philadelphia, Pa., April 28, 1924.

Every one in town began work this morning an hour earlier than usual, and every one will stop work tonight an hour earlier than was the custom last week.

This change is brought about by a process of self-deception. The man who went to work at 9 o'clock last week will begin at 9 o'clock by his watch today. He has put his watch forward an hour, so that is becomes 9 o'clock sixty minutes sooner. Many persons have wondered why we could not get the extra hour of daylight in the afternon by starting work an hour earlier by standard time instead of by putting the timepieces ahead and pretending we were starting work at the accustomed hour. But we seem to be creatures of confirmed habit. The man who usually begins work at 9 in the morning would feel abused if he were compelled to start at 8, and the man who starts at 8 would be indignant if his family were compelled to get up in time to prepare him to be at his work at 7. By juggling with the hands of the clock we deceive ourselves into thinking that we are starting work at the usual time, and we accept the extra hour of daylight when the work is done as a gift handed to us out of the air.

However it comes about, every one save a few sticklers for technical regularity gladly welcomes the arrangement. It gives us daylight enough after dinner for reading the evening paper without artifical light. It enables those who wish to take a ride into the country to enjoy the scenery which otherwise would be obscured by the quickly gathering twilight. Those who have gardens and flowers have time to cultivate them without running the risk of pulling up plants mistaken for weeds. And the boys who play ball on the vacant lots can finish their game before they are summoned home to go to bed.

Editors Note: "You can fool all of the people some of the time, and some of the people all of the time, but you can't fool all of the people all of the time." —Abraham Lincoln.

DAIRY INDUSTRY SUFFERED SERIOUS LOSSES IN 1923

Prices for milk, which have been relatively high for some years compared to meat products, took a serious drop the latter part of last year. The drop in price, combined with a shortage of roughage, high prices for concentrated feeds and scarcity of labor, is giving our Pennsylvania dairymen serious concern.

The situation will result in some reduction in the output of milk, and a careful analysis of how to cut costs. Cost reduction will come chiefly through labor-saving devices, the growing of more legumes, particularly alfalfa, and the weeding out of low-producing animals, is the opinion of John M. McKee, Deputy Secretary of the Pennsylvania Department of Agriculture.

The nearness of our dairymen to whole milk markets gives them a decided advantage, so much so that even in the face of present falling in prices, Pennsylvania's dairy industry promises to be a growing and profitable one in the future.

A little or even temporary ditching may make a lot of difference with the yield of some fields.

Dairy Council Service

The various departments of the Philadelphia Inter-State Dairy Council are available for service in both city and country.

Without Cost in Inter-State Territory

Lecturers and Speakers on Health or Nutrition Topics Available for the Grown Ups or for the Children.

Motion Picture Films on Dairy Subjects

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There is no charge for this service for local I. M. P. Meetings, Community or Local Meetings in the Philadelphia Milk Shed.

Let Us Plan Your Entertainment

Philadelphia Inter-State Dairy Council

Boyertown Building
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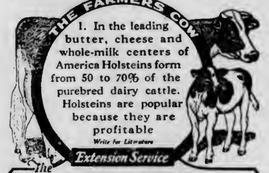
HOLSTEIN



1. In the leading butter, cheese and whole-milk centers of America Holsteins form from 50 to 70% of the purebred dairy cattle. Holsteins are popular because they are profitable

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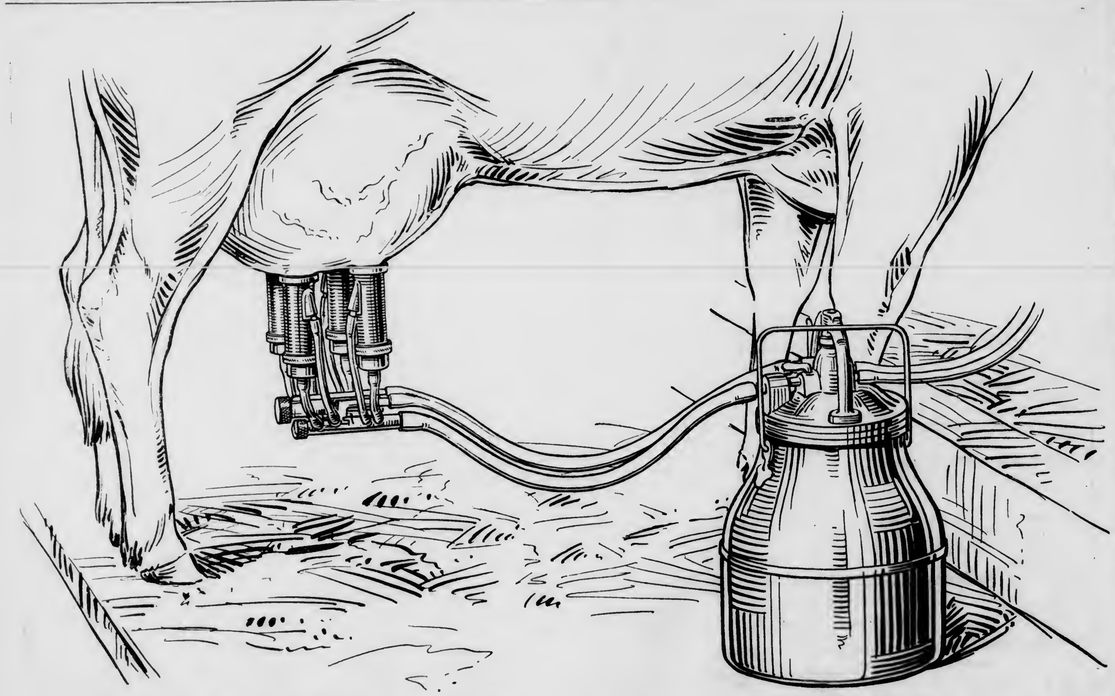

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(1) That the De Laval Milker is the only milking machine sold and used on a world-wide basis proves that it is recognized by the leading dairymen of the world as "The Better Way of Milking."

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INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS' ASSOCIATION, Inc.

VOLUME V WEST CHESTER, PA., AND PHILADELPHIA, PA., JUNE, 1924 NUMBER 2

SANITARY REGULATIONS WORKING SUCCESS

NINETY-NINE PER CENT IN OPERATION

With the passing of May 31st, when the new regulations adopted by the Inter-State Milk Producers' Association and enforced by the Philadelphia Inter-State Dairy Council became effective, it affords the first opportunity to stop and consider what has been accomplished.

To adequately handle the work of the inspection of dairy farms, receiving stations, and dealers' plants and to handle the correspondence incidental to the regulations and the records, it has been necessary for the Dairy Council to build up two groups of workers, one of which is to efficiently handle the work in the office, the issuing of the permits, the keeping of the records on each producer and the records of the various receiving stations and distribution plants. The office work under the direction of Miss Erma Cochran has been handled in such an efficient manner that pratically no producers who have applied for permits on or before May 29th were, in any way, affected by the selling of their milk on June 1st. Up to June 3rd 13680 permits have been issued to producers selling to co-operating dealers. This total will be very materially increased in the near future by the issuance of permits to producers shipping to dealers who have recently begun co-operating in this work. One dealer with over 1000 farmers and a number of smaller dealers having from 10 to 100 dairies each, have recently begun co-operating in this particular work.

In some instances, farmers have [illegible] procured temporary permits, and in accordance with the plans advised for the enforcing of the regulations, have either been stopped from shipping to the co-operating dealers or, in some instances, will be forced to apply for permits or cease shipping as soon as the records can be completely checked and brought up to date. So far, a survey indicates that not more than 100 farmers have had their milk rejected because of lack of permits on June first.

There does not appear to be any one section where there is a greater number of producers stopped because of lack of permits than in any other section. In general, it is one or two at each receiving station throughout the entire territory, with, of course, many exceptions where a number of the receiving stations have 100% of the shippers holding permits.

In the most cases those who have not procured their permits are very small shippers who have felt that they would rather market their milk through other channels than to comply with the regulations. The largest losses were the dropping of ten patrons at one receiving station and the loss of 30 cans of milk at another.

In some cases farmers have been temporarily discontinued from receiving stations because of their delay in applying for their permits and will be reinstated as soon as their permits have been received by them. Several applications were received on June 2nd by special delivery and, in several cases, by farmers paying a personal visit to the Philadelphia office to immediately procure their permit so that they could resume shipping the next day.

The inspection is going on rapidly so that in addition to practically all of New Jersey, a large portion of Bucks County, portions of Montgomery County and Berks County, Pennsylvania have been inspected. On the Eastern Shore of Maryland and Delaware, Dorchester County and Talbot County have been completely inspected while the work is going forward rapidly in Queen Anne's and adjacent counties. Mifflin County, Pennsylvania, has been almost entirely inspected while numerous individual dairies scattered throughout the territory have also been inspected by men while in their vicinity on other work. A very large proportion of the producers shipping directly into Philadelphia have been inspected.

Reinspections

Reinpsections are being conducted in some portions of the territory where the inspections were made during March and April and where the farmers have been definitely notified as to what improvements would be required in order to meet the conditions of the Regulations. On the reinspection, it is expected that every dairy shall then be in such shape as to warrant the issuing of a permanent permit and where changes have not been made to comply with the provisions of the regulations and unless there are reasonable excuses, these dairies are liable to be discontinued.

Over 3,000 inspections of dairy farms have been made, while about half of the receiving stations and plants of the dealers have also been inspected.

Amendment to Regulations

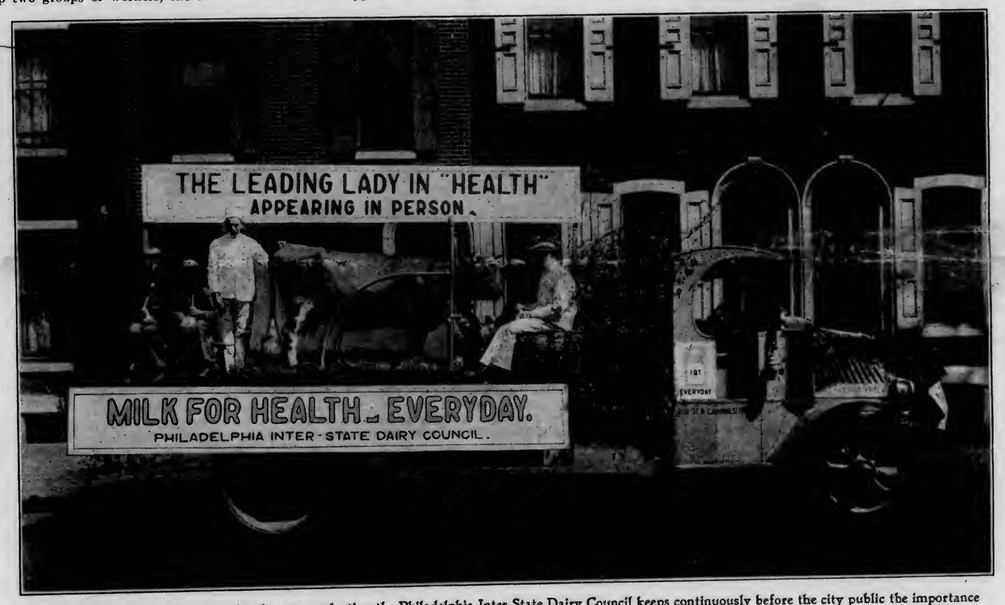
The regulation referring to the cooling of the morning's milk was amended to read as follows:—

"Milk must be removed as soon as drawn to a clean place and be cooled within an hour to as near 60 degrees as is practicable with the facilities available, except morning's milk delivered at receiving station before **8 A. M.** It must be kept covered and held at as low a temperature as practicable at all times."

This is a change from 9 A. M., which was formerly stated in the regulations, to 8 A. M. This change was made because it was felt that in very hot weather milk drawn from the cow early in the morning and reaching the receiving station as late as nine o'clock would not be delivered in marketabe condition, and in order to safeguard losses from sour milk and troublesome odors and flavors developing from lack of cooling within a reasonable length of time, the amendment as stated above was made.

In order to allow ample time for producers selling to dealers who have

(Continued on page 7)



Through such means as shown in the above reproduction the Philadelphia Inter-State Dairy Council keeps continuously before the city public the importance of the dairy cow in human nutrition. Exhibit used in the Boys Week Parade—Philadelphia, Pa., May 1st, 1924.

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VARIATIONS IN BUTTER FAT TESTS

F. M. TWINING

The Testing Department of the Inter-State Milk Producers' Association has received many letters from members enumerating instances of considerable variations in tests. Particularly have cases been reported where Cow Testing Association figures have differed materially from those used by buyers as a basis of making payment for milk.

The fat content of the milk of a herd of cows or of a single individual varies almost daily and has caused much wrangling between producers and buyers of milk.

The only accurate way to determine the monthly volume of fat is to test a sample taken from each day's milk. (The practice of buyers through out our territory is to take composite samples for fifteen day periods.)

Records kept of daily tests of a single herd handled under conditions as nearly alike as possible from day to day, showed tests of 3.25%, 3.8%, 3.35%, 3.8%, 3.5% 3.5%, 3.65%, and 3.85% of fat for nine consecutive days, the average was 3.58%, and the buyers composite taken from each day's shipment was 3.55%. It is therefore evident that had the cow tester arrived on one of the high days his test for that one day would have been considerably higher than that of the composite sample taken over the entire period; but, had he arrived on one of the low days; it would have been considerably lower.

The cow testing work is an inexpensive and fairly accurate method of determining the relative production of milk and butter fat of individual cows in the herd, and the estimation of the net return from each.

The two cows whose cow testing association records are here given were selected at random from the same herd and are fairly typical in comparison of butter fat variations from one test to another and the reliability of the average per cent of fat for one twelve month period compared with another.

A three months period elapsed between the time of finishing one year's work and the beginning of the other due to inability to obtain the services of a competent tester.

Now as to why the test does vary. Science as yet knows very little as to just how the glands of the udder secrete the fat of milk. It is definitely known however that whatever affects the cows nervous condition, effects a change in the fat content of her milk immediately.

Changes in time of feeding or milking, changes of milkers, lack of proper ventilation, weather changes, a stray dog, failure to completely milk cows have all been responsible for upsetting the test of a whole herd, not necessarily affecting all the tests in the same direction.

Change of feed is perhaps more commonly charged with having caused a variation in test than any other one factor. Of course sudden feed changes may bring about a temporary change of test and changing from a succulent or highly concentrated protein feed to one lacking succulence or to a carbohydrate feed will naturally affect the flow of milk and for a time the test. Cows highly fitted before freshening with certain kinds of feed, seem to test higher until the reserve of fat stored up has been exhausted, however we do not believe that a material change over a long period of time can be affected by normal changes of feed.

So much for the changes in the butter-fat content of milk up to and including the time of its secretion.

There are some very common losses in fat between the time the milk comes from the cow and the time it is delivered to the receiving station.

A very common occurence is the partial churning of milk when hauled over rough roads especially milk from Jersey or Guernsey cattle. This can be prevented by thorough cooling, filling cans entirely full and thorough stirring, immediately before hauling.

Milk that freezes in transit is likely to test lower than normal. Poor fitting can covers and rough handling tend to losses which lower tests. Before removing milk for home use from a can that has stood motionless any length of time, thorough agitation is advisable.

One cause of a farmer losing out on his test was a 17 year old colored boy with a keen appetite and a large internal storage capacity for cream. In several cases it has been found that hired men were taking extra milk home to their families unbeknown to their employers and replacing it with water.

The testing department of the Inter-State Milk Producers Association is ready at all times to assist members in accounting for low tests. Where cow testing associations are not in operation we have worked out a system by which a producer can locate his low testing cows. We have already helped several producers to thus eliminate their low testers and retain their markets when the herd test had fallen below standard.

St. Saviours Starlight Reg. Jersey Cow.
March 1, 1917 to March 1, 1918.

	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Total
Pounds Milk	1252.0	993.0	735.0	690.0	806.0	753.0	540.0	592.0	360.0			863.0	7584.0
Pounds Fat	62.6	53.6	45.5	33.1	36.3	40.0	25.9	32.5	19.1			50.0	398.6
Per cent Fat	5.0	5.4	6.2	4.8	4.5	5.3	4.8	5.5	5.3			5.8	

Average % fat 5.25

June 1, 1918 to June 1, 1919.

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	Total
Pounds Milk	741.0	642.0	516.0	372.0	499.0	285.0					1200.0	1349.0	5604.0
Pounds Fat	53.4	36.0	26.8	18.6	28.4	16.0					60.0	675.0	306.7
Per cent Fat	7.2	5.6	5.2	5.0	5.7	5.6					5.0	5.0	

Average % fat 5.47

Amleto Komdyke De Kol Reg. Holstein Cow.
March 1, 1917 to March 1, 1918.

	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Total
Pounds Milk	1233.8	1098.0	918.0	924.0	462.0				680.0	1184.0	1110.0	1081.0	8690.0
Pounds Fat	38.2	32.9	31.2	26.8	19.4				21.7	35.5	36.6	32.4	274.7
Per cent Fat	3.1	3.0	3.4	2.9	4.2				3.2	3.0	3.3	3.0	

Average % fat 3.16

June 1, 1918 to June 1, 1919.

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	Total
Pounds Milk	1095.0	1194.0	720.0	614.0	484.0	330.0	200.0		1487.0	1507.0	1644.0	1380.0	10655.0
Pounds Fat	32.9	33.4	21.6	19.6	20.3	13.2	8.0		50.6	48.2	54.3	41.4	343.6
Per cent Fat	3.0	2.8	3.0	3.2	4.2	4.0	4.0		3.4	3.2	3.3	3.0	

Average % fat 3.22

From the above figures showing the Jersey Cow ranging in test from 4.5% to 7.2% on different months test but averaging 5.25% for one twelve month and 5.47% for the other, a difference of only .22% fat, and the Holstein Cow ranging from 2.8% to 4.2% on different months tests, but averaging 3.16% for one twelve month period to 3.22 for the other a difference of only .06%, it is evident that if the cow tester testing only one day of the month finds the test the same as the dealers monthly average test, it is more or less of an accident and yet both testers may be doing as nearly accurate work as can be done.

LIVE STOCK REPORT SHOWS DECREASE IN LAST YEAR—MILK COWS INCREASE

Pennsylvania farmers had on hand January 1, this year, a total of 3,476,920 head of livestock. Last year, on the corresponding date, the total was 3,523,432. The decrease in numbers carried a proportionate reduction in the estimated value of the livestock on Pennsylvania farms. In 1923 the value was $125,482,-689 as compared with $137,072,218 in the preceding year.

The statement was issued by F. P. Willits, Secretary of the Pennsylvania Department of Agriculture, based on a report prepared by L. H. Wible, director of the Bureau of Statistics.

At the beginning of the current year, there were 465,585 horses on the farms of the State, valued at $81 a head, a total of $37,900,640. During 1922, there were 475,000 horses on Pennsyvania farms, at 93.85 a head, a total value of $44,636,879. The decline was about two per cent., attributable to the steady increase in the number of automobiles, motor trucks, and tractors which are supplementing horse power on the farms.

The number of mules, too, declined, the report discloses. This year the total is fixed at 54,125, at $95 a head, a value of $5,129,360, compared to 54,510, at $102.35, totaling $5,796,45 last year. This is a reduction of one per cent. in numbers.

Milk cows this year show a slight increase in numbers. It is estimated farms of the Keystone State support 862,835 dairy cows, at $57 per head, worth about $49,227,321 compared to 862,467, at $57,-80 a head, valued at $49,861,263 last year.

The present number of other cattle is placed at 587,145, averaging $29.90 a head, or a total value of $17,561,250, compared with 607,140, at $31.70 a head, totaling $19,260,590 last year.

Pennsylvania sheep number 485,505 head, averageing $6.20, valued at $2,841,-679, as compared with 455,510 last year, a gain of about one per cent. Reports show a decrease in virtually all counties except Washington and Greene, which have 49 per cent. of the sheep of the State where small increases in numbers have been made. The average value was the same during the two years, but the total value in 1922 was placed at $2,825,-930.

Hogs of all ages on Pennsylvania farms this year total 1,048,725, valued at $12.25 a head, or a total of $12,822,439, compared with 1,068,180 hogs, at $13.75 a head, or $14,691,111 one year ago.

BIG INCREASE IN 1923 CATTLE TESTS FOR "T.B."

That vast progress was made in cattle testing in this State during 1923 is disclosed in a report by Dr. T. E. Munce, director of the Bureau of Animal Industry, to F. P. Willits, secretary of the Pennsylvania Department of Agriculture. The statement covers a summary of tuberculin testing for the last 28 years.

Last year 17,038 herds, comprising more than 180,170 cattle, were tested for tuberculosis. Prior to 1923, the highest number of herds tested in any one year was 5,387, involving about 78,308 cattle.

Of the herds tested last year, 15,773 were found free of the disease, a percentage of 91. The highest previous showing of disease free herds was 75 per cent in 1922. In 1896, the first year reported upon, there were only 44 per cent of the tested herds found uncontaminated.

According to Dr. S. E. Bruner, who has direct charge of eradication of tuberculosis in cattle, the survey indicates conclusively that the disease can, and will, be gradually eliminated by the application of recommended principles of treatment.

HOLSTEIN-FFRIESIAN DELEGATES RICHMOND, VIRGINIA CONVENTION

Thirty-eight States and one Canadian Province have elected 148 delegates to the 31th annual convention of the Holstein-Friesian Association of American, to be held in Richmond, Virginia, June 4th.

The Pennsylvania delegates include: John A. Bell, Jr., Pittsburgh; H. E. Robertson, York; Dr. L. M. Thompson, Montrose; A. S. Deysler, Reading; Ivo V. Otto, Carlisle; Frank A. Keen, West Chester; J. B. Henderson, Hickory; O. A. Shirey, Williamsport; James M. Paxton, Houston; John B. Kendig, Willow Street and John H. Shirk, Lancaster.

The Maryland delegates are: John M. Dennis, Riderwood, and Charles Werthcimer, Frederick.

New Jersey delegates include: G. D. Brill, Jamesburg; M. H. Keeney, Cedargrove, and H. A. Davidson, Ramsey.

Delaware will be represented by J. Russell Danks, Winterthur.

These six counties, in the order given, are the leaders in Pennsylvania wheat production—Lancaster, York, Franklin, Berks, Chester, and Cumberland. They grow about 40 per cent of the State's total crop.

MARKETING MILK IN PHILADELPHIA

A Study by the Bureau of Agricultural Economics, U. S. Department of Agriculture Under the Auspices of The Inter-State Milk Producers' Association

In the summer and fall of 1923, Dr. Frank App, lately of the N. J. College of Agriculture, and Wright Hoffman, University of Pennsylvania, made a survey of the marketing of milk in Philadelphia for the Bureau of Agricultural Economics of the United States Department of Agriculture. This has recently been published in a mimeographed pamphlet of seventy-three pages illustrated with numerous charts. The following table of contents gives briefly an idea of the way in which the subject is treated:

Contents

The purpose of the survey is briefly described as follows:

1. To give a detailed description of the process of placing a quart of milk at the doorstep of the consumer.

2. To point out the main problems invovled in the marketing of milk in Philadelphia.

3. To indicate those larger movements in this area which point out future developments in the industry.

The authors pointed out that sixty years ago the middle Atlantic group of states, including New York, Pennsylvania and New Jersey, were of equal dairy importance with the East North Central group, including Wisconsin, Michigan, Illinois, Indiana, and Ohio, but today the former group have scarcely half as many cows as the latter group and have long since been surpassed by another group,the West North Central group, which includes Minnesota and Iowa. Not only has the middle Atlantic group declined in importance from the point of view of total number of dairy cows, but when considered in the light of a region whose population is rapidly increasing, the significance of this decline is brought out more clearly. This decline, in both absolute and relative importance, of dairying in the Middle Atlantic region is due primarily to the fact that butter can be produced at less cost on the cheaper western land and shipped East than larger amount on eastern farms; and as the population has increased a relatively larger amount of the milk produced in this region is sent to the cities as whole milk and larger amounts of butter drawn from the western states.

The general relation of these facts to the milk supply of Philadelphia is not had to see. The dairy industry in these eastern states has given way the relatively important position it held fifty years ago. In this respect it is not unlike other branches of agriculture. We are becoming a manufacturing and commercial nation, and this is particularly true in our eastern states. The result has been that as the population has increased larger demands have been made for dairy products. To meet this increasing demand necessitated more intensive farming or expansion. More intensive farming resulted in increasing costs, so the natural outcome was to reach out further for dairy products. Here the question of perishability entered, and butter and cheese were brought from the west and the near-by regions were drawn on for whole milk.

This statement merely gives the direction in which the dairy industry is going. It does not mean that no butter, condensed milk or cheese is manufactured in New York State or Pennsylvania. It simply means that throughout all of this eastern region, dairying is becoming more and more an industry producing whole milk rather than manufactured dairy products.

The Philadelphia Milk Shed

The Philadelphia milk shed includes the southeastern portion of Pennsylvania, the central and southern of New Jersey, all of Delaware, and that part of Maryland lying east of the Chesapeake Bay. Outside of this territory some milk is drawn from the northwestern part of Pennsylvania, and small quantities from New York State. When one considers the fact that for the year 1922 the consumption of milk in Philadelphia was 238.2 million quarts, he realizes that the area from which this supply is drawn is comparatively small.

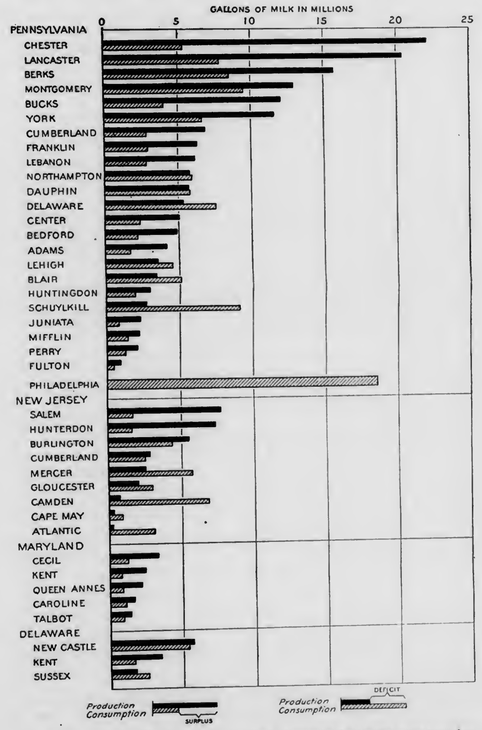
Production, Estimated Consumption, and Surplus Milk, Philadelphia Milk Shed

Of the total amount of milk produced in this area in 1920, a little less than one-fourth was shipped to Philadelphia.

To determine the amount of milk which each county can furnish Philadelphia, an estimate must be made of the amount each retains for its own use. This estimate subtracted from the total amount of milk produced will then give the surplus available for the Philadelphia market. In estimating the amount of milk necessary for home consumption, account must be taken of the fact that the urban population does not consume as much milk per person as the rural population. The estimate used for this purpose was accordingly two-thirds of a pint per person per day for the urban population, and one and one-third pints for the rural population. Multiplying each of these amounts by the urban and rural populations respectively of each county, the estimate of the annual amount of milk necessary for home consumption was obtained.

It does not follow that each county actually ships milk into Philadelphia either equal or proportionate to its surplus. There is a large amount of cross-shipment of milk from one county to another. Thus one might conclude that Delaware County used all of its milk at home and drew an additional supply from outside sources. The fact is that Delaware County does ship some milk into Philadelphia, and, in turn, must make up for this loss by an additional import from nearby counties. The chart shows: (1) What counties produce a surplus supply of milk; (2) estimate of how much that surplus is and (3) relative importance of each county as an ultimate source of supply for Philadelphia.

Five counties stand out in importance as having a large surplus of milk. In the order of their importance they are: Chester, Lancaster, Bucks and Berks Counties in Pennsylvania, and Salem County, New Jersey. Hunterdon County, N. J., also has a large surplus, but the major portion of the county belongs to the New York milk shed. So, also, York County, Pennsylvania, has a large surplus but it is shared with Baltimore, making it of less impotance in the Philadelphia area. All of these five counties lie within a radius of seventy miles of Philadelphia, which again shows the fortunate fact that Philadelphia does not have to transport the bulk of its milk supply a very great distance. To ascertain what counties of the Philadelphia area are the most intensive dairy areas, one method is to divide the total production of milk by the population of each county. This, however, gives too much weight to the city population. Other methods are to divide by the rural population, or by the number of farms per county. The index actually used was to divide the total production of milk by the total area (in acres). This takes account of the fact, as in Philadelphia County, that a large part of the land is covered by the city, or of the fact that in some counties large areas are mountainous, decreasing the amount of milk per acre of land.



Total amount of milk produced, amount necessary for home consumption and surplus for counties within the Philadelphia Milk Shed, 1920

Conclusions from Analysis.

What, then, are the conclusions we may draw from the analysis of dairying in the Philadelphia area? Will it be called upon in the future to draw its milk supply from a still wider area than at present? What will be the effect of an increasing demand for milk in Philadelphia upon the retail price of milk? These are difficult questions to answer. Future developments are not always revealed by what has happened in the past. All that can be done is to state what are the present directions toward which past experience indicates we are going. With this in mind the following conclusions seem warranted:

(1) The States throughout the eastern region of the United State are declining in importance as dairy regions producing manufactured dairy products. Instead dairy interests are turning their attention more and more to the production of market milk.

(2) Philadelphia, up to the present time, has not needed to draw its milk supply a very great distance.

(3) The area from which Philadelphia now draws its milk supply, produced, in 1920, at least four times the quantity of milk shipped to Philadelphia, (production—224 million gallons, with shipments to city —52 million gallons), with an estimated surplus above the needs of of home consumption of 19 million gallons after Philadelphia had been supplied. This surplus milk, which went into butter, ice cream and condensed milk principally, is available for future whole milk needs provided the price of whole milk is high enough to bring it on the market.

(Continued on page 8)

MUTILATED PAGE

INTERSTATE MILK PRODUCERS REVIEW

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Editorial

SANITARY REGULATIONS

The movement of the Inter-State Milk Producers' Association and the co-operating dealers in the Philadelphia Milk Shed towards better conditions has been an unqualified success.

May 31st, was the closing date governing the presentation of applications for permits, signifying the intention, both on the part of producers and distributors, that they would adopt the clean up program and make the necessary farm and plant improvements.

At this time approximately 99 per cent co-operation has been effected.

In many cases producers shipping to receiving stations have signed up full 100 per cent.

These Sanitary Regulations have had the unqualified support on the part of the co-operating buyers of milk and in a number of cases producers failing to obtain the necessary temporary permits have lost their usual market for milk.

This new program which will insure the consumers of milk with a safe and sanitary supply has had the commendation and support of health authorities throughout the territory and should undoubtedly lead to a greater consumption of milk by the public in general.

Dairy specialists and authorities in marketing methods who are closely watching the progress which we have been making, agree that this movement is more far-reaching in the way of improving the market for the producers of milk than any undertaken anywhere in the dairy world in the United States heretofore.

Uncle Ab says: A man without at least one deep faith is like a ship without an anchor; and most ships have several anchors.

GRASS AND GARLIC

The greater the consumption of milk, cream and ice cream the greater becomes the objection on the part of the consuming public to the flavor of grass and garlic.

In some sections of the Philadelphia Milk Shed the early growth of grass and garlic has been a greater nuisance, as far as fluid milk consumption is concerned, than ever before.

The heavy and almost constant rain fall during May have resulted in an abundent growth of garlic and objectionable grass flavors.

At some of the receiving stations there has been a heavy return of off flavored milk.

Inspectors from the Quality Control Department of the Philadelphia Inter-State Dairy Council have made numerous visits to receiving stations, inspecting the milk, where demands from members of the Inter State Milk Producers Association or buyers of milk have entered complaints.

In a very large majority of cases the percentage of milk rejected has been pretty generally substantiated.

The utmost care should be observed by producers not to present milk for acceptence that has a garlic or grassy flavor. Examine each can of milk before shipment.

Proper care, actually observed in connection with the feeding of cattle at this season of the year, will save a lot of milk from rejection.

If milk has the slightest indication of a garlic flavor, it should be carefully and thoroughly ariated before shipment.

Grassy flavors, which have been the principal cause of rejections in some sections, can be avoided by careful feeding of the cows. Two long a time of early pasturage, without grain on a dry forage ration, will very frequently result in the production of grassy milk.

The little extra time required in preparing milk for market at this time of the year, will be more than repaid by having milk in a satisfactory marketable condition when it reaches the receiving station.

STORAGE OF BUTTER BEGINS

The butter market, which at this season of the year, has a very strong bearing on the milk market took an upward turn during the last half of May. Apparenty the storage of butter has begun.

Notwithstanding the fact that the market has been relatively quiet and unsettled there is some evidence that prices have reached the bottom.

The low point in prices was early in the month, when they ranged around 37 cents for 92 score butter, New York City. The middle of the month prices ranged at about 40 cents, followed by a decline to 38 1/2 cents. Toward the close of the month the market was firmer at 41 cents.

The following statement is reprinted from "Crops and Markets."

The monthly cold storage reports showed the holdings of butter in the United States on May 1st was released May 15 and had a slight bearish influence on the market. The report showed holding on May 1, 1924 of 8,977,000 pounds as compared with holdings on the same date last year of 3,248,000 pounds, and a five year average of 6,401,000 pounds. This revealed surplus of 5,728,000 pounds over 1923 and 2,576,000 pounds over the five year average, and is the highest May 1 holdings since 1919.

It is true that this surplus has been discounted to some extent and no decided reaction was apparent at the moment. but nevertheless a surplus of close to 6,000,000 pounds of butter in storage at the beginning of the season is significant and the more conservative of the operators will undoubtedly proceed with caution.

Receipts at the four markets, have shown steady increases over each preceding week and over the corresponding weeks of last year.

THE MARKET SITUATION

The fluid milk market in the Philadelphia Milk Shed has been able to hold its own.

While the supply has, if anything been somewhat smaller than during the same period last year, the unfavorable and unseasonable late spring has had a material bearing on consumption.

The usual increase in the demand for ice cream has been small owing largely to the cool weather.

During the month manufacturing plants have had slight price concessions, owing to the fact that producers of evaporated and condensed milk have had to compete with other territories, where lower prices for fluid milk are being paid.

Butter prices averaged during May about 1.6 cents higher than in April

Prices of butter have been easing off for some months but are now believed to have reached the low point for this spring.

Taken on the whole the fluid milk market has not been particularly strong but by close cooperation with buyers we have been able to maintain prices.

NOTICE

AMENDMENT of RULE E SANITARY REGULATIONS

At a meeting of the Executive Committee of the Philadelphia Inter-State Dairy Council held May 12, 1924, Rule E, Paragraph 1, page 5, Cooling Milk, of the Regulations, was amended to read as follows:

"Milk must be removed as soon as drawn to a clean place and be cooled within an hour to as near 60 degrees as is practicable with the factlities available, except morning's milk delivered at receiving station before 8 A. M. It must be kept covered and held at as low a temperature as practicable at all times."

FARM WORK IN PENNSYLVANIA TEN DAYS TO TWO WEEKS LATE

Farm work in Pennsylvania is from ten days to two weeks late in southern counties, three weeks late in the middle belt, and a month behind the usual schedule in the northern tier of counties. The nights have been cool and generally adverse to rapid growth.

This statement on the outstanding features of the agricultural situation, as reflected in reports received by the Pennsylvania Department of Agriculture from crop reporters in all sections, was announced by Paul L. Koenig, the Federal-State agricultural statistician.

The report further showed:

Corn planting in Pennsylvania is progressing fairly well in the southern part of the State, but is much later than usual. Not much plowing or planting for this crop has been done in other sections.

Bare spots in wheat and rye fields are filing in nicely in many counties. Many fields that seemed doubtful may yet have a good yield. Oats seeding is getting under way in all but a few of the most northern counties. It is late but well along in the southern part of the State.

Cool weather and abundant rainfall has been good for grasses. Clover and alfalfa were quite badly frozen in spots, especially in heavy soils. Pastures on well-drained lands have been able to carry stock since early in May, but on low flat lands were still too soft.

Fruit prospects were reported to be excellent, particularly in southern counties where the trees blossomed well. There was no frost damage.

MILK AND INSURANCE

There is a deep rooted belief that doctors do not take their own medicine. The Metropolitan Life Insurance Company, however, which has been urging people to drink more milk, shows its faith in its own prescription. The milk-man who supplies the home office building of the Metropolitan at No. 1 Madison Avenue, New York City doesn't have to worry about adding new customers to his milk route.

Last year the Metropolitan used in its home office 3,649 quarts of cream, 357,056 quarts of milk, 16,920 quarts of condensed milk and 19,200 quarts of evaporated milk, not to mention 91,246 quarts of ice cream.

It not only serves milk with the regular daily luncheon to its 7,425 office employes, but it maintains a "milk room", where at 11 o'clock each morning and 3 o'clock each afternoon, such employes as have been recommended by the examining doctor for additional nourishment get an extra serving of milk and crackers. Last year the number of persons served in the milk room averaged 276 twice daily and they put away some 66,010 bottles of milk.

COW TESTING ASSOCIATIONS IN PENNSYLVANIA

Twenty-seven cow testing associations out of a total of thirty-three in the State of Pennsylvania, report 7362 cows on test, 1003 cows in the month of February giving more than 40 pounds of butter and 1253 cows giving more than 1000 pounds of milk.

In addition to the above 40 pound list, 348 cows gave more than 50 pounds fat and 703 cows gave more than 1200 pounds milk. There were 24 cows reported on official test. Fifty-six unprofitable cows were sold and 8 registered bulls purchased during the month.

The highest ten cow average for February in butterfat was 74.3 pounds made by the Laurel Hill Association, and the second honor was won by the Cumberland County Association with a yield of 71.7 pounds butterfat.

Maggie S. Ware, wife of Frank O. Ware, director of the Inter-State Milk Producers Association, died on May 31st, 1924,at her home in Deerfield Street, New Jersey.

The funeral was held on Tuesday, June 3rd. Mrs. Ware has been in ill health for a long time.

Mr. Ware has been a director of the Milk Producers Association ever since its formation.

LATEST MARKET PRICES

Philadelphia Selling Plan

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1924. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1923.

Beginning with January milk will be paid for on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount will be paid for on the average New York 92 score butter price for the month, plus 20 per cent. Milk in excess of an amount equal to the basic quantity will be paid for on a flat average New York 92 score butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts), of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

MAY BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.75	3.64	7.8
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

MAY BASIC MILK
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	$2.44
11 to 20 "	.283	2.48
21 to 30 "	.308	2.41
31 to 40 "	.318	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.519	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

MAY SURPLUS PRICES
F. O. B. Philadelphia

Test per cent.	Class I per 100 lb.	per qt.	Class II per 100 lb.	per qt.
3.	$1.99	4.25	$1.68	3.6
3.05	2.01	4.3	1.70	3.65
3.1	2.03	4.35	1.72	3.7
3.15	2.05	4.4	1.74	3.7
3.2	2.07	4.45	1.76	3.75
3.25	2.09	4.5	1.78	3.8
3.3	2.11	4.5	1.80	3.85
3.35	2.13	4.55	1.82	3.9
3.4	2.15	4.6	1.84	3.95
3.45	2.17	4.65	1.86	4.
3.5	2.19	4.7	1.88	4.
3.55	2.21	4.75	1.90	4.05
3.6	2.23	4.8	1.92	4.1
3.65	2.25	4.8	1.94	4.15
3.7	2.27	4.85	1.96	4.2
3.75	2.29	4.9	1.98	4.25
3.8	2.31	4.95	2.00	4.3
3.85	2.33	5.	2.02	4.3
3.9	2.35	5.05	2.04	4.35
3.95	2.37	5.05	2.06	4.4
4.	2.39	5.1	2.08	4.5
4.05	2.41	5.15	2.10	4.5
4.1	2.43	5.2	2.12	4.55
4.15	2.45	5.25	2.14	4.6
4.2	2.47	5.3	2.16	4.65
4.25	2.49	5.35	2.18	4.65
4.3	2.51	5.4	2.20	4.7
4.35	2.53	5.4	2.22	4.75
4.4	2.55	5.45	2.24	4.8
4.45	2.57	5.5	2.26	4.85
4.5	2.59	5.55	2.28	4.9
4.55	2.61	5.6	2.30	4.95
4.6	2.63	5.65	2.32	4.95
4.65	2.65	5.7	2.34	5.
4.7	2.67	5.7	2.36	5.05
4.75	2.69	5.75	2.38	5.1
4.8	2.71	5.8	2.40	5.15
4.85	2.73	5.85	2.42	5.2
4.9	2.75	5.9	2.44	5.2
4.95	2.77	5.95	2.46	5.25
5.	2.79	6.	2.48	5.3

MAY SURPLUS PRICE
Country Receiving Stations

Test	Class I per 100 lb.	Test	Class II per 100 lb.
3.	$1.42	3.	$1.11
3.05	1.44	3.05	1.13
3.1	1.46	3.1	1.15
3.15	1.48	3.15	1.17
3.2	1.50	3.2	1.19
3.25	1.52	3.25	1.21
3.3	1.54	3.3	1.23
3.35	1.56	3.35	1.25
3.4	1.58	3.4	1.27
3.45	1.60	3.45	1.29
3.5	1.62	3.5	1.31
3.55	1.64	3.55	1.33
3.6	1.66	3.6	1.35
3.65	1.68	3.65	1.37
3.7	1.70	3.7	1.39
3.75	1.72	3.75	1.41
3.8	1.74	3.8	1.43
3.85	1.76	3.85	1.45
3.9	1.78	3.9	1.47
3.95	1.80	3.95	1.49
4.	1.82	4.	1.51
4.05	1.84	4.05	1.53
4.1	1.86	4.1	1.55
4.15	1.88	4.15	1.57
4.2	1.90	4.2	1.59
4.25	1.92	4.25	1.61
4.3	1.94	4.3	1.63
4.35	1.96	4.35	1.65
4.4	1.98	4.4	1.67
4.45	2.00	4.45	1.69
4.5	2.02	4.5	1.71
4.55	2.04	4.55	1.73
4.6	2.06	4.6	1.75
4.65	2.08	4.65	1.77
4.7	2.10	4.7	1.79
4.75	2.12	4.75	1.81
4.8	2.14	4.8	1.83
4.85	2.16	4.85	1.85
4.9	2.18	4.9	1.87
4.95	2.20	4.95	1.89
5.	2.22	5.	1.91

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile one at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1923		
January	6.35	2.89
February	6.35	2.89
March	6.35	2.89
April	6.35	2.89
May	7.1	2.78
June	7.1	2.78
July	7.35	2.85
August	7.35	2.85
September	7.35	2.85
October 1-15	7.35	2.85
October 16-31	7.1	2.78
November	6.35	2.89
December	6.35	2.89
1924		
January	6.35	2.89
February	6.3	2.87
March	6.3	2.87
April	6.3	2.87
May	6.3	2.87

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations

1923	Average per month Class I	Class II
January	$2.49	$2.07
February	2.86	1.97
March	2.37	1.93
April	2.24	1.86
May	2.02	1.68
June	1.86	1.56
July	1.86	——
August	2.08	——
September	2.19	——
1924		
January	2.58	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51

JUNE PRICES
F. O. B. PHILADELPHIA
Country Stations

The same prices for basic milk as quoted above under May apply in June, subject, however, to change whenever warranted by market conditions.

"Ours Was Just a Common Old Barn—

Today We Have as fine a barn as there is in our neighborhood, and it did not cost near as much as a new one. We were handicapped for hay storage—our cows were crowded. They didn't get fresh air and sunshine. Doing chores took twice as long as they do now. One day one of my boys got ahold of the

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He got ideas. Then we called in the Jamesway man in our county. He helped us—showed us how we could have steel stalls, pens, drinking cups, a smooth running litter carrier, perfect ventilation—everything at low cost, by simply improving the old barn. Today our cows give more milk and show off better in the barn. It's a pleasure to work around them."

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James Mfg. Company

"Jamesway" ELMIRA, N. Y.
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MAY BUTTER PRICES
92 Score Solid Packed

	Philadelphia	New York	Chicago
1	37 1/2	37	35 1/2
2	37 1/2	37	35 3/4
3	38	38	36
5	39	38 1/2	37
6	39	38 1/2	36 1/2
7	39	38	36
8	39	38	36
9	39 1/2	38 1/2	38
10	40	39	36 3/4
12	40 3/4	40	37
13	40 3/4	40	37 1/2
14	40 3/4	40	37 1/2
15	40 1/4	39 1/2	37 1/2
16	39	38 1/2	37 1/2
17	39	38 1/2	37
19	39 1/2	38 1/2	37
20	40	39	37 1/2
21	40 1/2	39 1/2	37 1/2
22	40 1/2	39 1/2	37 1/2
23	40	39	37
24	40	39	37
26	40	39	37
27	40	39	37 1/2
28	41	40	38
29	41	40	38 1/4
30	41	40	38 1/4

Keep Temporary Permits

ON FILE IN YOUR MILK HOUSE OR DAIRY STABLE

Field Men must consult them when making inspection.

IF POSSIBLE TACK PERMITS ON MILK HOUSE WALL

ANNUAL DINNER OF WEST GROVE LOCAL

The annual dinner of the West Grove, Pa., local of the I. M. P. A. held May 15, was the largest in its history. Among the speakers were Hon. F. P. Willits, Secretary of Agriculture for Pennsylvania; Secretary Balderston and Dr. Lyons.

Dairy Council Service

The various departments of the Philadelphia Inter-State Dairy Council are available for service in both city and country.

Without Cost in Inter-State Territory

Lecturers and Speakers on Health or Nutrition Topics Available for the Grown Ups or for the Children.

Motion Picture Films on Dairy Subjects

Lantern Slides, Literature, Posters

Plays for the Children, Etc.

The Dairy Council has carried the message of "Milk for Health" to thousands of consumers and producers. Why not make use of them in your community.

There is no charge for this service for local I. M. P. Meetings, Community or Local Meetings in the Philadelphia Milk Shed.

Let Us Plan Your Entertainment

Philadelphia Inter-State Dairy Council

Boyertown Building

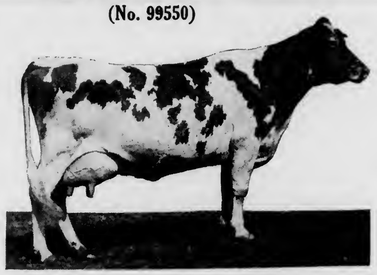
1211 Arch St., Philadelphia

Quality Wins Out

Smashes World Record!

GERTRUDE CLAIRE

(No. 99550)



Photograph of Gertrude Claire No. 99550

PENNSYLVANIA FARMERS' CO-OPERATIVE FEDERATION
FOUR SQUARE SEAL INSURES A SQUARE DEAL

100 lbs. (net)
P. F. C. F. 24% Milk Maker

Guaranteed Analysis

Protein (minimum) 24.00%
Fat.. (minimum) 5.00%
Carbohydr. (Min.) 45.00%
Fibre (maximum) 9.00%

Digestible Nutrients 1506 lbs. per ton

200 lbs.—Corn Dis. Grains
240lbs.—OilMeal(OldProc)
500 lbs.—Gluten Feed
200 lbs.—Wheat Bran
260 lbs.—Cottons'd Meal, 43%
100 lbs.—Wheat Middlings
100 lbs.—Peanut Oil Meal, 40%
100 lbs.—Ground Oats
160 lbs.—Yellow Hominy
100 lbs.—Molasses (cane)
20 lbs.—Salt
20 lbs.—Cal. Carbonate

2000 lbs.—P.F.C.F.Milk Maker.

Manufactured for Penna. Farmers' Co-operative Federation, Inc. Philadelphia, Pa.

Renfrew Pa May 5-1924

To whom it may Concern:

Gertrude Claire No 99550, a pure bred Guernsey cow, was started on A.R. test Oct 22-1923, at the age of 4 years, in just fair condition. She was fed on home grown feed for three weeks and then switched to 24% Milk Maker.

After three weeks feeding on 24% Milk Maker a marked improvement in her condition was noticed.

She gained in weight, her coat become glossy, and the increased flow of milk was quite marked.

Also the increase in Butter Fat.

Her Milk production for the first 192 days was 11,130# milk and 519 B.F.; This leading the world record cow of her class by 705# Milk and 74# B.F.

I therefore highly recommend P.F.C.F. Dairy rations.

Yours respectfully,
Floyd R. Hartzell
Butler Co. Pa.

Just as a race horse must have a chance to make a record for speed so must you give your cow a chance to make a record as a milk and butter fat maker.

Every cow is an unprofitable cow until fed right. *You* may have a record cow. Put her on P. F. C. F. Milk Maker and find out as did Mr. Hartzel.

If P. F. C F. Milk Maker is not on sale in your community—Write

Pennsylvania Farmers' Co-operative Federation, Inc.

Offices: Heed Building **Philadelphia, Penna.**

A Co-operative Purchasing Association *Buying Quality Supplies for Farmers*

GLEANINGS FROM THE FIELD

CHESTERTOWN, MARYLAND, DRIVE FOR MEMBERS

The campaign for new members, which was recently run in the vicinity of Chestertown, Md., was very successful. About 85 new members joined the Association for a total of 742 cows. This is an average of between 8 and 9 cows per herd. In addition to the new members there were 12 transfers reported and a large number of corrections.

Perhaps in no section where an organized drive has been conducted have a larger proportion of the men called upon shown their appreciation of organization and their willingness to lend their aid to co-operative selling.

Chestertown was the central point about which this campaign revolved, although Kennedyville, Worton and Centreville were used as reserve territories when the work neared completion and it became impractical for more than one man to spend his time in the Chestertown section. As a result of this drive both the Worton and Chestertown plants are now very close too 100 per cent membership, taking their place beside Hurlock and Sudlersville in the roll of best organized plants in Maryland. Chestertown and Worton are both situated in Kent County.

A comparatively new feature of this campaign was the careful routing of each canvasser previous to sending him on the road. This allowed each man to work alone, a decided asset in the farmers bussy season, when local drivers are practically unobtainable, and also made possible a more thorough working of the territory than has been possible heretofore.

Rains and bad roads, two features of all recent drives, were a factor in this one during a part of the working period. They did not, however, last as long nor retard the work as much as formerly. It is safe to say that if Kent County farmers stick to organization as Kent County sticks to flivers that this section will present a very wholesome Association membership for some time to come.

LARGE CO-OPERATIVE DAIRY IN FRANCE

A report of the Surgeres Co-operative Dairy, submitted by the American Consul at La Rochelle, France, shows receipts of milk for 1923 to the amount of 4,329,607 litres, or 1,143,886 gallons. Of this quantity 64,538 gallons was sold as fluid milk in the neighboring cities. The remainder was manufactured into butter and casein, making 162,691 kilogrammes (357,920 lbs.) of butter, and 95,512 kilogrammes (210,126 lbs.) of casein.

This co-operative dairy has 649 members who furnish the milk from 2,717 cows, the average yield per cow being 1,968 litres (220 gallons) per year. Each member is required to insure his cows as soon as they are one year old. If an animal becomes sick the farmer receives 75 per cent. of the cost of treatment, or, in case the animal dies, he receives 75 per cent. of the value of the cow.

Do you realize the value of tomatoes in your meals? Authorities say that we should eat them, either fresh or caned, at least three times a week. As a source of those valuable vitamins about which so much is heard nowadays, tomatoes are hard to beat.

Too much water in concrete makes a sloppy mixture and a weak job; and look out for having it too dry, also.

COMPETITION IN DAIRYING

By A. L. Haecker

This is a competitive world, and our civilization has been built along the line of the survival of the fittest. Whether you believe in evolution or not you can congratulate yourself that you had some pretty good ancestors or you would not be on earth today.

The farmer has been feeling competition most keenly since the war. This is due to many causes: poor prices for farm products compared with prices for other commodities, high labor costs, and a higher standard of living on the part of the farmer. How much we can change these conditions through legislation is a question that will not be discussed here.

The American dairy farmer is protected by a tariff which in round figures is thirty-two cents on one hundred pounds of milk or its products. This does not prevent the importation of dairy products from eight or ten countries, but consumption has taken it all and prices are still pretty good.

In my opinion the time is coming when we will have a surplus of dairy products and turn from an importing to an exporting country. This will mean a lower price which we must be prepared to meet. The principal expense in dairy production is the cost of feeding the cows, and we are fortunate in being able to compete with any country on this score. We who live in the alfalfa and corn belt are favored and should be able to compete with any state or country. If we have to go out of the dairy business because we cannot compete, then I say we ought to quit, for it shows we are lame ducks on the essential economic factors of dairying.

Keep it in mind there are a lot of states doing a great work in the dairy business, and they are increasing their output at a rapid rate. The Government figures show that the state of Michigan has doubled her output of butter during the past seven years; Minnesota and Wisconsin have increased from 40 to 50 per cent; California, Ohio, and Indiana have all shown a marked increase. The Dakotas and Nebraske are also increasing rapidly. Idaho and Montana are putting on dairy campaigns, and Nebraska is preparing to double her dairy business in the next five years. The southern states are encouraging dairying, and Kentucky has a Better Sires-Better Feeding campaign, which beyond question will result in a big increase. The dairy farmer has prospered and has come through this agricultural depression with flying colors. Dairy districts are not complaining of hard times. The country banker will tell you in short order that his patrons who milk cows have good credit in his bank.

We can stand over-production providing we are producing with economy. States keeping cows that produce from 100 to 150 lbs. of butterfat cannot compete with states keeping cows that produce 200 or 250 lbs. per cow. Neither can farmers compete who feed inefficiently, who ignore the economic value of the silo or the value and use of legume hay.

While we are building our dairy industry let us understand the importance of laying the foundation on a substantial basis so we can turn from an importing to an exporting country without suffering a loss.

Sour milk and buttermilk can be used with soda in making hot breads, or sour milk can be turned easily into cottage cheese, cream cheese, or clabber.

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK — BESTOV — FROM COW TO CONSUMER

3 CASH PRICE OFFERS

Believing that the average dairyman today appreciates opportunity to buy "right", we offer these three items that every farm needs, at extremely low prices. To do this we require CASH WITH ORDER. Bookkeeping expenses, etc. are thereby avoided and these close-margin prices made possible.

DIAMOND MILK STRAINER

Send money by money order, personal check or registered mail. Do not send stamps.

This strainer is made of a seamless drawn bowl, tinned. The bottom is fitted with ⅛-inch mesh wire, the idea of this large mesh being to pass the milk through freely. A fine wire mesh spreader lies on a sheet of absorbent cotton, to take the pour from the milk, so it will not mat the cotton, and a wire spring holds the cotton and spreader in place. Capacity 10 quarts.

Diameter 12½ inches, Depth, 9 inches **Each $2.00** **Postage Free**

Cotton Discs, box of 300, $2.50

FISH MOUTH MILK PAIL

A good pail; the cover prevents dirt from falling into the milk. Made of 4X tin plate. One-piece top, steel bail, 4 rivet reinforced ears. Opening 8¾x5¾ inches.

12 qt, $1.85 ea.
14 qt., $2.00 ea.
14 qt., Seamless $3.50 ea.
POSTAGE FREE

WE PAY THE POSTAGE

Cherry-Bassett-Winner Company

MONEY BACK GUARANTEE

Bell Phone Locust 1018 — 1918 Market Street, PHILADELPHIA — Next to Stanley Theatre

BUY THE OLD RELIABLE

SO-BOS-SO

TRADE KILFLY MARK
REG. U. S. PAT. OFF.

and Add $9.50 to Your Profits From Each Cow This Summer
$15.00 for 15 gal. drum
28.50 for 30 gal. drum
Delivered Via Prepaid Freight

Send check or money order and deduct 2% discount. First thousand dairymen ordering will be sent FREE a quart Sprayer for applying. GUARANTEED TO RID YOUR COWS OF FLIES or money promptly refunded. Write for So-Bos-So Kilfly More-Milk Folder. It's free.

H. E. ALLEN MFG. CO., CARTHAGE, N. Y.

SANITARY MILK REGULATIONS BIG SUCCESS

(Continued from page 1)

recently begun co-operating in the Sanitary Regulations to make any such changes as may be needed on their premises, they have been granted an extension of time beyond May 31st so that in such cases, producers will not be expected to meet the provisions of the regulations before fall. The exact date will be agreed upon by the Executive Committee of the Dairy Council later. Producers who are shipping to dealers who have recently begun co-operating will not be inspected at this time, but will be given opportunity to make any changes necessary as prescribed on their applications for permits.

"Vitamin" is hardly in the dictionary yet; it is the name given something that no one has yet seen. But the presence or absence of vitamins in food has a known effect on growth and health. Leafy foods and milk contain a growth-promoting vitamin.

FORD CAR GIVEN

Free of Cost

Solve This Puzzle—Win 5000 Votes

23	9	14	6	15	18	4	3	1	18

What words do these numbers make? The numbers in the squares represent letters of the alphabet. Figure 1 is A. 2 is B and so on. The ten figures spell three words. What are the words. Full particulars with 5000 Votes toward Ford Car and other Grand Prizes will be sent as soon as your solution is received.

Thousands of Dollars in Prizes and Cash Rewards

I am going to give away a new Ford Touring Car, also many Grand Prizes and Cash Rewards, Bicycles, Phonographs, Gold Watches, Diamond Rings, Silverware, etc., etc., to those who are prompt and energetic in following my instructions in my contest for more readers which closes Sept. 12, 1924. Leader gets Ford Car. All who take part rewarded. Get your share of these Prizes and Cash. Prizes duplicated in case of tie. Send no money. Just a postcard or a letter with your name, address and puzzle solution. Don't let anyone beat you to it. Send your puzzle solution and address QUICK.

DUANE W. GAYLORD, 537 S. Dearborn St., Dept. 60., Chicago

THE RIGHT MILK COOLER FOR FARM USE

NO MATTER what kind of water supply you have, we have the right Farm Milk Cooler to suit. Either gravity or pressure type. If you don't have running water, our Siphon system or our Circulating Pump will solve your problem. For fifty years we have been manufacturing high grade dairy equipment. **We'll show you how to keep your milk from 24 to 48 hours longer**, and we won't need to experiment at your expense. Our coolers are rust-proof and wear-proof. They are easily cleaned, for they have no corners. Prices range from $31.50 to $75.00 according to type and size. **A guarantee of complete satisfaction goes with each cooler. Tell us about your water supply, and we'll tell you how to get satisfactory results.**

Ask for free descriptive circular No. 12

A. H. Reid Creamery & Dairy Supply Co.
69th St. & Haverford Philadelphia, Pa.

"I do hope that you keep your cows in a pasture," said Mrs. Newlywed as she paid the milkman. "Yes'm," replied the milkman, "of course we keep them in a pasture." "I'm so glad," gushed Mrs. Newlywed. "I have been told that pasteurized milk is much the best."

Detroit Free Press.

CRUMB'S Chain Hanging Stanchions

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.

HOLSTEIN

THE FARMERS COW

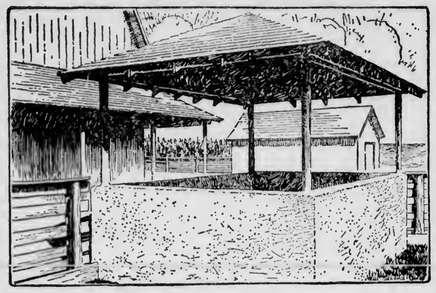
2. Of 94 cows producing 1000 lbs. butterfat or more in one year, 77 are Holsteins. As a breed they average highest in official tests for total butterfat. Holstein production insures profits

Write for Literature

Extension Service

The HOLSTEIN-FRIESIAN ASSOCIATION of AMERICA
230 EAST OHIO STREET, CHICAGO, ILL.

Mention the Review



Manure, Money— and Concrete

Every time you pitch manure out into the open barnyard, you throw away money. Your yearly loss amounts to about $13 per cow. That's no small sum when you come to figure it up.

You can save this money year after year by building a Concrete Manure Pit.

The Concrete Pit does not allow any of the valuable fertilizing elements to escape. And remember that two-fifths of the nitrogen in the manure is in the liquid.

A Concrete Manure Pit quickly pays for itself in the money it saves. And it keeps on earning dividends indefinitely. You can easily build one yourself.

Our free booklet "tells how." Ask for a copy of booklet F-14.

PORTLAND CEMENT ASSOCIATION

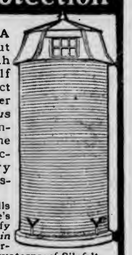
1315 Walnut St. PHILADELPHIA — 347 Madison Avenue NEW YORK

Union Trust Building WASHINGTON, D. C.

A National Organization to Improve and Extend the Uses of Concrete

Offices in 30 Cities

Triple Strength Triple Protection



Three walls. A smooth, clean-cut giant in strength that holds itself straight and erect and *stays* so! Outer wall of *continuous* spiral hooping firmly binds it into one solid, durable structure, with every square inch cross-supported.

Like the double walls of a house, the Craine's multiple walls defy frost—keep warmth *in* and cold *out*. Its air-tight middle wall of waterproof Silafelt stops moisture from entering and holds in all the valuable silage juices.

A handsome farm building that protects silage, and reduces upkeep cost, the Craine Silo is the best investment in the end. Write for Catalog and full information, *now*. Special discounts on early orders. Time payments if desired.

CRAINE SILO COMPANY Box 239 Norwich, N. Y.

CRAINE TRIPLE WALL SILOS

COULDN'T FOOL THIS GIRL

A little girl and her mother were visiting in the country, on a farm. Having always lived in the city the cow was a great curiosity to the child and she was very much interested in watching its movements.

One day she saw the farmer milking. She watched him as he carried the milk into the house and strained it and it was put on the table for the evening meal. She was much surprised, as in the city the milk always came in bottles.

A glass of milk was set at each place. She refused to drink her portion and was asked by her mother why she did not drink the milk.

Putting her arm around her mother's neck and drawing her head down she whispered:

"Mamma, where do you think he got that milk?"

"I don't know," replied her mother. "Where did he get it?"

"Why," exclaimed the little girl, "he squeezed it out of an old cow. I saw him."—Boston Post.

MARKETING MILK IN PHILADELPHIA

(Continued from page 3)

This surplus, however, is not large when considered in the light of the increased demand each year for market milk.

(4) Changes going on within the Phila- area in dairying are not uniform, some counties declining in total number of dairy cows, while others are increasing in number. In general, the areas on the outer portions of the milk shed are increasing more rapidly in importance than the areas nearer Philadelphia, though there is not a great deal of uniformity in each region.

(5) Judging from the number of cows in the Philadelphia area in 1890 and in 1920, so far as dairy capacity is concerned it is entirely possible to increase in the future the number of dairy cows 13 per cent. or more.

Present Process of Marketing Milk.

A detail description of the actual process of marketing whole milk, will make possible a study of factors affecting the demand for milk, factors affecting the supply of milk, the price of milk, and the probable future development of the market milk industry in this vicinity.

In the modern marketing of milk, as in many other commercial processes, there are intricacies and difficulties surrounding it which are ordinarily overlooked by the layman. So much like clock-work has the process become that one is likely to think that it consists of only a few simple steps ending in the receipt of the milk by the consumer. Such a conclusion in itself is not harmful, but often one is likely to argue, with the idea of simplicity to start with, that the cost attending it should be small, instead of expensive as it is, and this too often results in friction between all parties concerned—consumers, producers, dealers. It is for this reason that a more detailed knowledge of the work attending the production and marketing of milk, both in the past and at the present time, is highly desirable.

PUBLIC SUPERVISION

Including a Historical survey of Milk Marketing.

There are many good reasons why public supervision of the city's milk supply has developed to its present proportions. Milk is in many respects unique as a food. There is no substitute for it. The much discussed vitamines are found principally in milk, and it is for this reason that Professor E. V. McCollum, concludes that "milk is, without doubt, our most important foodstuff. This is true because the composition of milk is such that when used in combination with other foodstuffs of either animal or vegetable origin, it corrects their dietary deficiencies." This reason alone would be sufficient to make public regulation advisable, but the added fact that milk lends itself peculiarly to adulteration and the transmission of disease germs makes supervision absolutely necessary. To a large extent it is similar to the water supply of a modern city. Thus one student of the subject draws the following parallel between the two:

While in some respects the case of water is different than milk, in many ways it will be seen that it is strikingly similar. But while there are urgent reasons for the most strict supervision by the public, it has only been within the last fifteen years that material progress has been made. To get an understasding of the present regulations, which have aided the industry to make many improvements, the best method is to trace briefly the development of milk marketing down to date, with special reference to the question of health and sanitation.

The author next shows in detail how the production and distribution of milk for a large city has been developed since 1850, when all the milk of the city was produced within a short radius by farmers who themselves delivered it to the consumers' doorsteps. They trace in detail the introduction of glass bottles and their gradual use for all milk distribution. In 1884 Dr. J. C. Morris published the results of an experiment which he had made in delivering milk for the first time in glass bottles. In 1909 the City Board of Health was given the power to regulate the sale of milk in Philadelphia. On July 1, 1914, they made a regulation requiring the pasteurization of all milk within the city.

In discussing the varying consumption of milk from season to season and from year to year, it is pointed out that this seasonal variation was in times past very much less than the seasonal variation in production, as will be shown by the chart of the seasonal demands for several years in Philadelphia.

Having considered the field from which the demand for milk is derived, it is now in place to inquire from what source the demand is met. Modern thought in marketing is emphasizing more and more the necessity of first measuring as accurately as possible what the demand for a commodity is, and then meeting that demand. Certainly this is preferable to the practice of blindly producing and then placing the finished product on the market at whatever price can be obtained.

Sources of Philadelphia Supply in 1922

The general field from which Philadelphia receives its milk supply was surveyed in the first section. In the present section it will be necessary to bring the analysis down to a consideration of the actual regions now drawn on for the milk supply of Philadelphia, and then to analyze the variations in this supply and the influences causing them.

Chart 12 gives a picture, by ten-mile zones, of the relative amounts of milk shipped into Philadelphia in 1922. The sources of supply in distance and direction from the city are not uniform. A lack of railroad facilities, country receiving stations and proper soil are the leading reasons for variations between different sections. Before 1850 the primary consideration was convenience in hauling to the consumer. With the advent of transportation by rail the centers of market-milk dairying widened, following out the railroad lines. Between 1885 and 1900 the necessity for larger and larger amounts of milk brought into use the country receiving station, and this in turn entered as an important factor affecting the direction of dairy development. In each period, the relative profit of dairying to that of raising other farm products,—tobacco, fruit, grain, vegetables,—has played probably the most important part in directing dairy development.

Philadelphia derived the bulk of its supply of milk in 1922 from within a radius of seventy miles and that the zone shipping the greatest amount was the 41-50 miles zone.

(Continued on page 9)

MARKETING MILK IN PHILADELPHIA

(Continued from page 8)

Seasonal Variation in Supply

While an accurate index of the Philadelphia supply of milk cannot be obtained, it is possible to obtain the supply of individual dealers. This has been done for two of the leading dealers of the city. Their total monthly receipts of milk at all of their country receiving stations have been combined, and are shown in graphic form on Chart 14 for a period of four years. The outstanding feature of the chart is the seasonal variation in the supply of milk between the winter and the summer months. This seasonal variation creates one of the leading problems of the dealers.

While the demand for whole milk increases some in May and June, it is not nearly sufficient to absorb the increase in supply, and the result is the dealers have a surplus amount of milk to dispose of in manufactured form as condensed milk, butter, ice cream, or cheese. During July and August there is also some surplus, though in July in particular the supply falls off considerably due to dry, hot weather, and in August increased consumption of whole milk and ice cream solves the problem to a considerable extent.

The leading reason for this large summer supply, particularly in May and June, is the fact that there are more milk cows coming fresh in the spring of the year than at other seasons. If cows maintained their production of milk throughout the year until time to come fresh, it would make very little difference at what time they became fresh. But the practice is, particularly in sections not highly developed as dairy regions, to milk the cows during the summer months, when pasture is abundant and feed costs low, and to allow the herd to dry in the Fall and early Winter. This results in a surplus supply in the summer and a deficit in the winter, working a particular hardship on those who are in the dairy business the year around.

The Philadelphia Selling Plan is next discussed in detail and the authors explain its effect upon the supply, how it has influenced the supply of milk in the Philadelphia Milk Shed to the extent of materially decreasing the seasonal variation above referred to, year by year, and thereby improving the average price received by producers.

The authors next discuss the factors which influence the price of milk. It compares the price of milk received in Philadelphia by farmers and also the retail price to consumers during a period of twelve years, and the authors show, whereas the price received by farmers has been fully as high as that paid elsewhere in the United States under similar conditions, the retail price to consumers was the lowest of the same group of cities.

Reasons for a Favorable Price in Philadelphia

This favorable price is due in part at least to two things: First, the distance which Philadelphia has to ship milk is less than for the other cities shown, with the exception of Baltimore. This lowers one of the important costs of producing milk—that of transportation. The second explanation is found in the efficiency of the milk distributing system of this city. Almost all of the milk in Philadelphia is delivered bottled to the customer, with practically none sold in bulk, and only a small amount through stores. Dr. Clyde L. King, Milk Price Arbitrator for State of Pennsylvania, estimates that over 90 per cent. of the milk handled in this city is delivered direct to the customer. The handling of large loads by the drivers cuts down materially the cost of delivery. Two of the five leading dealers of the city delivered on an average 423 quarts of milk per load during the first six months of 1923.

In much detail the work of the Inter-State Milk Producers' Association is described. A very interesting explanation being given of the history of the Association, its successes and present activities.

In conclusion, the authors explain the effect of improved prices on dairy development in this area. They ask the question: Have the improved conditions in the dairying industry in this section had any effect in increasing the supply of milk within the area? It is a well known fact that to increase the price of milk in one city to such an extent that it gets out of line with other nearby cities will result in arbitrating between cities. This difference in price must be enough to pay the transportation and the trouble of shipment. But before this inter-city point is reached, an increased price to the producer within the milk shed, if maintained over a sufficient period of time, should be a stimulus to increased production. In a survey made in August of this year (1923), farmers interviewed from five different sections of the Philadelphia Milk Shed reported an increase of 21% in the number of cows milking this summer (1923), over the number milked during the summer of 1919. While this covered only sixty farms, the fact that they were selected over a wide area, and that each section reported an increased number, is thought to warrant the conclusion that the number of dairy cows being milked is increasing. This is a significant contrast to the U. S. Census data. It was shown there that from 1890 to 1920 the number of dairy cows for this area had been decreasing.

Further evidence on this question is shown in the accompanying table:

The counties selected here are the leading dairy counties of this area. An examination of the table shows that from

NUMBER OF DAIRY COWS AND HEIFERS, ONE YEAR OLD AND OVER

County	1900	1910	1920	1921	1922	1923
Berks	45,044	36,170	36,581	36,580	37,310	37,310
Bucks	34,788	27,848	26,857	26,900	27,400	27,125
Chester	52,677	50,738	45,298	45,300	46,210	45,750
Delaware	14,743	12,894	8,422	8,450	8,840	8,575
Lancaster	51,398	43,905	45,915	45,915	46,840	48,245
Montgomery	30,897	26,136	26,129	26,000	26,655	25,855
York	36,405	31,998	31,837	31,850	32,795	33,125
Franklin	20,567	20,220	19,617	19,650	19,425	20,010
Cumberland	18,155	17,292	18,742	18,700	19,300	19,680
Lebanon	15,254	13,344	13,987	14,000	14,270	14,415
Total	319,928	280,545	273,385	273,345	279,045	280,090

(Continued on page 11)

Because Health Comes First

"Grain them in summer? I should say I do. Not quite so much when there's pasture, of course, but they get LARRO every day in the year—if it's only a pound or two."

That's how they talk nowadays because they know health comes first—sleek, silky-coated, bright-eyed health—cows in tip-top, splendid condition.

Such cows are ready when it comes time to freshen and they have good, sturdy calves. They don't go off feed. They don't have udder trouble, lax appetites and indigestion. You don't pay big bills for medical treatment.

If your'e feeding LARRO you're feeding for health and profit. If you're feeding LARRO every day in the year—in spring, summer, fall and winter—you're feeding for the big, long profit.

All the care used in making LARRO—the safeguards against nails, wire and trash—the strict exclusion of all fillers and off-grade ingredients—the careful standardizing to get absolute uniformity in every particular—the exact proportioning of each ingredient—all these things have a two-fold object: health for your cows and the biggest possible profit for you.

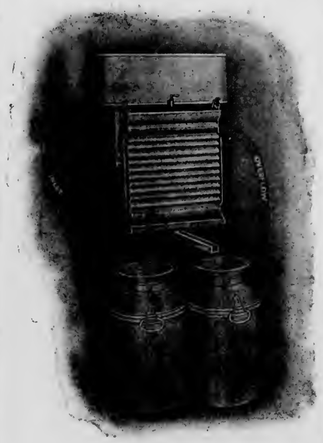
There's a LARRO dealer near you. If you don't know where to find him, we'll be glad to have you write us.

The Larrowe Milling Company

118 Larrowe Bldg. Detroit, Michigan

Faultless MILK COOLER

The new milk regulations state: "Every farmer must maintain in his Dairy House an approved method of cooling his milk."



Faultless Milk Cooler

COOL THE MILK

KEEP IT COOL

IT WILL STAY SWEET

Faultless Coolers are made of tinned copper and with proper care will last a lifetime. Complete with Suppy Tank and brackets. Just hook it up to well or spring water. Thoroughly cools and aerates as rapidly as milk is brought in.

PRICES

No.	Gals. per Hour	No. Milkers	No. Cows	Price
150	40	2-3	10-15	$30.00
200	50	2-4	15-20	35.00
250	60	3-4	20-35	40.00
300	85	4-8	35-75	45.00

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Manufacturer of Dairy Supplies and Dairy Equipment — "The Dairy Supply House"

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Read Silo Character
As you do a man's

YOU read a man's character in his *face*. Look to the same features on a silo to judge its qualities.

In the front of the Unadilla Silo, you can see many practical, valuable advantages that speak of the thoroughness, care and thought with which every detail of the whole silo is worked out.

Its continuous opening; water-tight, air-tight, non-sticking doors; wide, safe, easy combination door fasteners and ladder; door front assembled at the factory; hoop ends adjustable from ladder, these and many other features of the front of a Unadilla are some indication of the bigger silo value the Unadilla gives you for every dollar.

Send for catalog. You'll find it full of silo information you shouldn't miss.

For the man who orders early we offer a special discount that makes a real saving in your silo purchase.

The Unadilla can be had on convenient terms.

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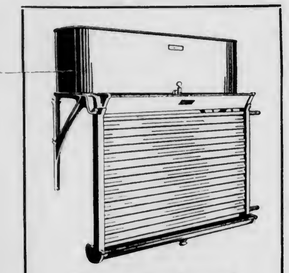

Chester Producers' Milk Cooler

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Send for our new catalog

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MORE VEGETABLES

Six Reasons for Eating Vegetables

1. They are one of Nature's best tonics.
2. They give us heat and strength.
3. They give us bulk—to prevent constipation.
4. They give us iron—to make good blood.
5. They give us lime—to build strong bones and teeth.
6. They give us vitamines—to keep us in general good health.

Leafy Vegetables are Best—Eat one of these every day.

Spinach	Beet Greens	
Swiss Chard	Cauliflower Leaves	
Cabbage	Lettuce	Best if eaten raw except for very young children
Brussels Sprouts	Romaine	
Kale	Endive	
Dandelions	Watercress	
	Cabbage	

How to Cook Leafy Vegetables

Pick over leaves and wash thoroughly in lukewarm water to remove sand. Put in a strainer and rinse with cold water until clean. The best way to cook leafy vegetables is to steam them. If you have no steamer cook in little or no water in a tightly covered pan just long enough to make tender.

Cook spinach 7 to 10 minutes. Chop fine, season with salt and butter.

Always use the cooking water either with the vegetable or in making milk sauces or soups.

All Other Vegetables Are Also Very Healthful—Eat at least one besides potatoes daily.

Tomatoes	Turnips	String Beans
Peas	Potatoes	Onions
Beans	Carrots	Egg Plant
Celery	Beets	Squash
Cauliflower	Parsnips	Salsify

Cooking Points for Other Vegetables

1. Steaming is one of the best methods of cooking. No vegetable flavor or food value is lost. The same is true of baking vegetables.
2. In paring vegetables, remove as little of the outside skin as possible.
3. To boil fresh vegetables, use just enough boiling water to cover. Salt while cooking. Keep closely covered. Cook only until tender. **Use the cooking water with the vegetable or in making milk sauces or soups.**
4. Old cabbage, turnips and onions are much sweeter if cooked in a large quantity of boiling water with the cover off. Most cabbage can be cooked in 20-30 minutes. Longer cooking of cabbage makes it harder to digest.
5. Dried vegetables, as peas, beans and lentils, should always be soaked over night before cooking.

THE HEALTH VALUE AND FLAVOR OF VEGETABLES IS LOST BY OVER-COOKING —COOK ONLY ENOUGH TO MAKE TENDER

Philadelphia Child Health Society
(Formerly The Child Federation)
1506 Locust Street
(Member of Philadelphia Welfare Federation)

MISCELLANEOUS RECIPES

Appropriate to the Season

Stuffed Cabbage

Cut out heart of cabbage and stuff with bread and sage dressing, or chopped veal, and mix with seasoning and egg. Tie carefully and boil two hours. Serve with or without cream sauce.

French, String and Wax Beans

The beans should snap when bent. String carefully, break off the ends and cut in two or three pieces. Let them stand fifteen minutes in cold water. Drain. Throw them into boiling salted water. Cover and boil half an hour. Uncover, and let them cook steadily one and one-half hours if the beans are light ones, and an hour longer if they are the green variety. If the beans are nearly dry do not drain them, but add butter and sweet cream and more salt if needed before serving. Or cook a little piece of salt pork with the beans. When done, take out the pork, drain off the water, and serve with a little cream or cream sauce. Green shelled beans may be cooked in the same way. They will be ready to serve in thirty or thirty-five minutes.

Spinach Salad

Prepare the spinach as for spinach a la mode, and then chop fine and place in a bowl and add:

1 small onion, chopped fine
1 tsp. salt
2 tsp. paprika

Mix and then pack in demi tasse cups to mould. Turn on a bed of crisp lettuce leaves and serve with French Dressing.

Baked Potatoes and Cheese

6 large baked potatoes	1/4 lb. Pimento or American cheese—rub through grater
1/3 cup hot milk	1/8 tsp. paprika
2 tsps salt	

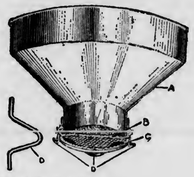
Cut potatoes in half lengthwise and scoop out the content. Mash thoroughly. Add cheese to hot milk, and beat with egg beater until smooth. Mix with the potatoes, add seasoning, and whip until light and creamy. Refill the potato shells and bake in a hot oven for 10 minutes.

Asparagus

Scrape off the coarse skin, tie in bunches making the tips even, and cut off the woody ends, leaving them of equal length. Wash and lay them in boiling water, slightly salted, and cook slowly twenty minutes, or till tender. Take out the asparagus carefully, lay it on thin slices of buttered toast, and remove the strings. Serve with melted butter or cream sauce.

Milk supply of 32 States

Strained through the Dr. Clark Purity Milk Strainer



A. Strainer Funnel.
B. Sterilized cotton through which milk MUST GO.
C. Coarse wire screen ring for clamping cotton pad to bottom of funnel.
D. Wire clamp.

Why? Because our Dr. Clark Purity Milk Strainer will remove every last bit of dirt from the milk—and no other strainer will—we guarantee it. Make us prove it.

That is why more than ten million quarts of milk are strained daily through the Dr. Clark. Why Borden's uses it—and Van Camp, Sheffield Farms Co., Carnation Milk Co., Mohawk Milk Co., League members—and other dairies all over the country. Why milk inspectors, agricultural colleges and dairy and food inspectors endorse it.

10-qt. and 18-qt. sizes. Insures absolutely clean milk that brings the top market price. Lasts a lifetime and is inexpensive. If your dealer can't supply you, write

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FARM LOANS

Plan which Saves Money and Gives Security and Stability to the Farmer

For Circular, write to

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FRED RASMUSSEN, President

Operated Under Federal Farm Loan Act

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Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

MILK FOR HEALTH

MARKETING MILK IN PHILADELPHIA

(Continued from page 9)

1900 to 1920 the total number of dairy cows was decreasing; from 1920 to 1923 the total number is increasing. From these two sources of information the conclusion can be drawn that there is a definite increase taking place in the dairy cows, and hence in the supply of milk, within this area. Were the data sufficiently exact it would be possible to bring together the demand and supply during the past four years and determine which is growing faster.

This Valuable Booklet Closes With the Following Summary

The past six years has been a transition period in the milk marketing industry in Philadelphia. During this period the consumption of whole milk has rapidly increased, requiring the building of additional receiving station and the opening up of new supply areas; during this period the producers have built up an active organization of over 18,000 members; during this period constructive improvement has been made in the sanitary conditions of marketing, the leadership being taken by the Philadelphia Inter-State Dairy Council, with the close co-operation of the leading dealers of the city and the Inter-State Milk Producers' Association. Within this six-year period a start has been made toward stabilizing the supply of milk from month to month, a move which promises to be far reaching in its effect.

Note—Complete copies of this Survey may be obtained from the Bureau of Agriculture Economics, United States Department of Agriculture, Washington, D. C.

FARM GARDENS STRESSED IN EXTENSION PROGRAM

What is the income to be derived from the garden on the ordinary farm if properly planted and cultivated? An attempt to answer this question is being made by the agricultural extension department of the Pennsylvania State College this year in a series of farm garden demonstrations in six counties in different sections of Pennsylvania.

Agricultural economists are agreed that the garden will be an important factor in tiding the farmer over the present economic depression. With this point in mind, the vegetable extension specialists are supervising the laying out, planting, and cultivating of ten gardens on farms in Bucks, Berks, Montgomery, Bradford, Centre and Lancaster counties. Accurate records will be kept on the costs of these gardens and the value of the products raised.

The vegetable specialists feel that certain weaknesses now exist in farm garden practices which can easily be corrected. Many of the gardens are too small to furnish all the vegetables for family use, and often their size and arrangement is such that labor is not economized.

WASH THE MILKING MACHINE

Thorough washing of the milking machine is essential in the production of clean milk. All parts of the machine coming in contact with milk should be sterilized with steam or boiling water every day. An ordinary wash boiler can be used to good advantage. The parts are placed in the boiler with the lid on and the water heated to 190 degrees. The boiler is then removed from the stove and the parts left in the water until the next morning.

DAIRY RATIONS

The dairy extension department of the Pennsylvania State College has just revised the summer feeding suggestions for dairy cattle which is prepared each year.

"The pasture season is too often welcomed as the time when a clear profit can be made on milk and when grain feeding is thought unnecessary," is the statement R. M. Olmstead, dairy extension specialist, makes to the dairymen.

"Grass is a bulky, watery feed containing approximately 75 to 90 per cent water, depending on its maturity. It is rich in mineral matter, medium high in protein but low in energy producing nutrients. The protein and mineral matter in grass are of a high quality which combined with its succulent nature, give it a superior power to stimulate the secretion of milk.

Due to its succulent nature, it is impossible for a cow to consume enough grass to supply the required nutrients for high milk production. Without additional feed, the cow must call on her own reserve to make up the deficiency. This means a loss of flesh which may not show in the milk pail immediately but will result in a lower production during late summer and the following winter. Profits are not made on high production during the pasture season alone but on high yearly production."

"Grain feeding to cows on pasture is absolutely essential for high yearly production," he adds. "Home grown grains such as corn, oats or barley are sufficient for cows of average milk production. With high production an additional protein feed is necessary. Early pasture or short pasture should be supplemented with a good quality hay, summer silage or soiling crops in addition to a good grain ration.

One of the following rations are highly recommended by the department:

600 lbs. Corn and Cob Meal, 400 lbs. oats or bran.

700 lbs. corn and cob meal, 200 lbs. gluten, 100 lbs. C. S. or oil meal.

400 lbs. corn and cob meal, 100 lbs. 24 per cent ready mixed.

300 lbs. homing or corn meal, 200 lbs. oats, 100 lbs. bran.

600 lbs. corn and cob meal, 300 lbs. oats or bran, 100 lbs. C. S. or oil meal.

200 lbs. corn and cob meal, 100 lbs. 24 per cent ready mixed.

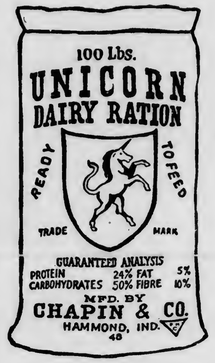
200 lbs. corn meal, 100 lbs. gluten, 100 lbs. bran.

300 lbs. corn and cob meal, 100 lbs. oats or bran, 100 lbs. 24 per cent ready mixed.

When the cows are first turned on pasture the dairy specialists recommend that grain be fed at the same rate as on dry feed. As the pasture becomes more abundant and mature, grain may be withheld from Jerseys and Guernseys, giving less than 20 pounds daily and from Holsteins and Ayrshires giving less than 25 pounds daily. Cows producing more than this should be fed one pound of grain to each five or six pounds of milk produced daily by Jerseys and Guernseys and one pound of grain to each six or seven pounds of milk produced daily by Holsteins and Ayrshires.

Farm labor conditions in New Jersey, as reported on May 1st, shows the supply of farm labor at present is estimated at 74 per cent. of normal and the demand at 90 per cent. of normal, making the potential farm labor supply 82.2 per cent. of normal. (New Jersey Crop Report.)

MILK FOR HEALTH



FOR a *lower* daily cost of feed, and a *larger* daily average of milk, get—

UNICORN

for your herd.

Remember—
More Profit Per Day
—For More Days

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Now easy to purify milk utensils

Amazing liquid does it in third the time—cheap too

The best way to sterilize all milk utensils is now the easiest. No equipment, no steaming, no bother. Officials and health boards say it's the best way—the famous B-K rinse. Its germ killing power never changes. The last drop is as powerful as the first. Simply mix B-K, an amazing hypochlorite solution with your rinse water. It's so powerful that two spoon fuls make a whole pail-ful of germ killing purifier. It penetrates the greasy film in milking machines, separators, cans, bottles, strainers, etc., and kills the bacteria that thrive there. It cuts the slime from separator bowls as nothing else can do it. The slime pours right out instantly.

It's better than scalding, for scalding hardens the greasy film of milk solids. You can use B-K with wonderful success many places where heat cannot be used—rubber parts, certain apparatus, cows' udders, floors, etc. Its strength is reliable and known. Every day you get the same sure results.

Get a jug of B-K at your dealer's. He guarantees it and will refund your money if you are not satisfied. Use this new easy way and make more money with less labor and time. See free offer below.

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Golden Princess Judith, Junior 2-year-old Jersey

Produced 10,073 lbs. of milk and 638.77 lbs. of butter-fat in 305 days

Another World's Record Broken by a De Laval Milked Cow

Golden Princess Judith, a junior two-year-old purebred Jersey cow, owned by Mrs. Mary J. Harris of Deerfield, Mass., has just recently broken the world's record in her class by producing 10,073 lbs. of milk and 638.77 lbs. of butter-fat in 305 days. She carried a calf 200 days of this period.

This remarkable cow was milked with a De Laval Milker, and William L. Harris, Jr., under whose care the record was made, says:

"Judith responded well to the machine. I also like the De Laval Milker and feel sure we could not continue testing without it, or keep a milking herd."

Many records have now been made by cows milked the De Laval Way, and almost daily evidence is accumulating proving beyond question of doubt that the De Laval Milker, because of its uniform, gentle and stimulating action, is better than any other method of milking, either hand or machine.

Cows milked with a De Laval Milker almost invariably produce more milk, which in addition to the great saving in time and cleaner quality of milk produced, soon pays for one.

There are now thousands in use. Sold on such easy terms that they will actually pay for themselves while being used. See your De Laval Agent or send for complete information.

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INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE IN[illegible] MILK PRODUCERS ASSOCIATION, Inc.

VOLUME V — WEST CHESTER, PA., AN[illegible] Y, 1924 — NUMBER 3

SELECTING ANIM[illegible] THE DAIRY HERD

By E. [illegible]TTS, Pennsylvania State College

If money is to be made in dairying there must be quality in dairy cattle. This is fundamental to success. By quality, in this connection, we refer to working ability or power to convert feed into milk. The mission of dairy cattle, as is also the case with most other classes of farm live stock, is to convert, or manufacture, the rough, bulky crops of the farm into food for the human race. Dairy cattle are more efficient in this important work than are other classes of live stock and for this reason they are found on a majority of the farms in this country. As population becomes more dense the tendency will be more and more for dairy cattle to supplant other food producing animals.

While it is a fact that dairy cattle as a class are more efficient than other farm animals yet we find great differences existing among them in ability to work for their owners. Dairymen should never lose sight of this important point. Instances are very common where one cow will yield twice as much milk as will another kept under exactly the same conditions and eating the same kinds of feed. Entire herds equal in number, kept on adjoining farms, where the same opportunity exists, often vary 100 per cent. or more in amount of milk produced. In other words the milk check received by one farmer from creamery or milk plant will be twice that received by his neighbor and this difference may continue month after month and year after year. Inferior working ability in dairy cattle often brings disaster to the dairyman no matter how carefully he feeds or how hard he works.

Successful or profitable dairying being dependent upon quality or working ability of the cows in the herd, skill in selecting animals becomes a matter of prime importance. The most successful dairymen are good judges of dairy cattle.

Selecting the Breed

The best herds, in fact nearly all profitable herds, are built up along breed lines. The person who chooses a breed and sticks to that one breed has a much greater opportunity for success than the one who changes from breed to breed. The dairy breeds have developed as a result of many years of careful work in selecting and breeding with the goal ever in mind of constant improvement in type and in efficiency. As a result the dairy breeds, Ayrshire, Brown Swiss, Holstein, Guernsey and Jersey, or grades of these breeds, produce more milk for feed consumed than do cows of other breeds or cows of mixed breeding.

The first step then in selecting animals for the dairy herd is choosing the breed. Individual preference and the predominant breed in the community are factors to be considered. There is no best breed. Breeds differ it is true, and each perhaps excells all others in some one point but none is outstanding above the others in all points. The breeds with high testing milk are favorites in many communities where cream or butter are sold while those yielding larger quantities of milk of a lower test are popular in market milk territory. If no particular preference exists choose the breed that produces the quality of milk called for by the market at hand. It is, however, of advantage to unite with other dairymen in the community in the choice of a breed or to choose the breed already common in the community. Greater progress follows a community interested in a single breed and a more ready market develops for surplus cattle.

An Outstanding Holstein-Friesian Cow (See page 3)

Selecting Individual Cows and Heifers

Breed selection alone is not sufficient to insure a good herd. The selection of individual animals within the breed is of equal or even greater importance. Inferior strains exist in all the dairy breeds which results in inferior animals appearing in pure bred herds from time to time. The selection of individual cows within the breed or grades of the breed becomes, therefore, a vital matter. This is especially true if one is choosing foundation animals on which to build a herd. Years of time may be saved in developing a high producing herd of good breed type if one starts with good foundation animals. Type is very important and should always be carefully considered. This is especially true in case of pure bred herds. By type we mean shape, form, adherence to breed lines and adaptability to purpose for which kept.

Milking ability is an inherited character that be it great or small is a permanent part of a cow's makeup or existence. The only certain way of determining the milking ability or usefulness of a cow as a milk producer, is to keep a record of her actual milk production during an entire lactation period. This is accomplished only through weighing her milk daily or at stated intervals during the year. Estimates based on amount produced in one day or for short periods are usually far from accurate. Cow testing associations are in existence in dairy sections all over the country because of a general recognition of the great need of records of milk production of individual cows in the dairy herd. These associations are groups of dairymen who unite in hiring a man to visit the herd of each member once a month and to weigh and test the milk of each cow. At the close of the year authentic records are available showing the total milk production of actual working value of each cow. As a means of selection, milk records point the way.

A cow must stand or fall on her ability to work. A cow having once demonstrated the ability to produce paying quantities of milk will possess this ability until disease, accident or old age reduce her efficiency or remove her from the herd. She will in addition always have a strong tendency to transmit this same working ability to her offspring. On the other hand the cow that fails to produce a satisfactory yield under favorable conditions will always be unsatisfactory and she in turn will pass her poor qualities on to her offspring. Shun this type of cow as you would a pestilence.

The man going out to buy cows will find, however, that the vast majority of cows have no dependable records of production and the purchaser must rely on other means of selection. Here is where the eye of the dairyman needs to be trained to recognize good and poor points. A good judge is skillful in seeing the outer indications of internal working ability and is able to select the workers with a fair degree of accuracy. He looks for size of animal, for capacity of barrel, for evidence of constitution, for size, shape and quality in udder, for a straight, strong back and rump, for a shapely head with prominent bright eye and a large muzzle and finally for a proper balance of these important points coupled with a lean, rather angular appearance known as dairy temperament. In addition in selecting cows or heifers it is desirable to get all the information one can of sire and dam of the animal or animals under consideration. This is especially important in the case of calves and heifers. If the sire is well bred and dam a good producer the heifer will probably develop into a good cow but this is not infallible. Her work in the very first lactation period should be carefully checked in order that her present and probable future usefulness may be known.

Selecting the Sire

Sire selection is a matter of outstanding importance to the dairymen. The dairy herd is constantly changing. Animals are continually dropping out through disease, accident or old age or are removed because of inferiority. On an average there is a loss in number of 18 to 20 per cent. yearly. Replacement must be through purchase or by raising heifer calves. Good cows for sale are not plentiful and most dairymen must raise a sufficient number of heifer calves to maintain the herd. The usefulness of these calves to him as milk producers at maturity and their type or beauty of form is determined by their inheritence. Dairymen can control inheritence through selection of breeding animals. The sire is of first importance because his individuality and inheritence are transmitted to every animal born in the herd.

The future herd is dependent upon the breeding work of the present. The herd will improve in working ability and value or go backwards just according as the sire possesses and transmits good or poor qualities. Through selection the

(Continued on page 10)

THE GIANT ELECTRIC SURVEY

What it Means to Pennsylvania Farmers

What farmer, coming home late at night and floundering around to put his horse away in the dark has not wished for electric lights through which by simply turning a button, he could illuminate the stable and wagon shed, and who has not spent years of nervous dread of a fire in his barn through the upsetting of a lantern in the horse or cow stable?

What farmer, pumping water for eight or ten cows has not wished as he watched them drink it up much faster than he could pump it, that he could keep the water trough filled by simply turning an electric switch?

What farm wife, washing clothes or sweeping, has not longed for an electric motor to help take the drudgery out of the farm home?

Pennsylvania is a state with wonderful natural resources. Several of these can be and are being utilized in the development of power for the uses of the people of this state as well as of the whole nation. But the farmers and rural people of Pennsylvania have not had, in the past, equal opportunity to share in these resources. The use of electricity on Pennsylvania farms has been particularly retarded and restricted. No plan for the future development of the power locked up within the mines and waterfalls of the state will be complete that does not contemplate its fullest possible use by the rural people.

Governor Pinchot, in describing this matter in "The Survey" for March, 1924, says "No system can be considered socially sound which ignores the more or less immediate requirements of upwards of 900,000 farm population, a million or more rural population not living on farms, and perhaps as many urban and semi-urban householders—now without current."

This is one of the subjects being studied by the Giant Survey Power appointed by the Governor as a result of action at the last Legislature. Governor Pinchot goes on to say, "Just how far we can go in carrying power to the farmers of Pennsylvania will not be known until the survey is completed. We have roughly 200,000 farms and 100,000 miles of road. Hence, over the whole state our farms are one-half mile apart. In many of the counties the average distance between farms will be much less. In Ontario where the government owns the power system, they estimate the cost of constructing overhead rural lines at $1,200 a mile. Recently they have discovered that they can lay cable underground in rural districts at about $800 the mile. Interest and amortization charges on such an investment will evidently not act as a bar especially where farms average three or more to the mile. Experience in Ontario indicates that farms supplied with current sell for $1000 more than those without."

"France has recently created a fund of 60 million francs to be used in aiding groups of farmers to pay for rural lines. Under this arrangement the government meets half the expense of such construction. In Ontario under recent legislation the government pays one-half the 'prime cost,' which is interpreted to mean one-half the cost of lines along public highways or about one-third the whole cost of making rural connections. I cite these two cases to show that in other countries it has been considered important to put power on the farms as to warrant government subventions.

"In much the same way, cheap and plentiful power is almost sure to effect a wider distribution of our industrial effort. One of the impressive points about the 'Hydro' system in Ontario is the fact that all the small towns from Niagara to Windsor (250 miles away) have access to power on relatively equal terms. Here industrial development is widely diffused and even small towns—towns 'where the community mind has a fair chance to grow up and function'—are on somewhat the same footing as the larger centers.

"Giant Power looks forward to making current at the places and under the conditions where it can be made cheapest and then transporting it, if need be, great distances to points of use. Competent authorities say that this is now fully feasible. There was a time when the cost of making 'juice' (the vernacular for electric current) at the mine mouth was without special interest for the Bucks county farmer or even the householders in our larger cities. In each instance the controlling factor was the cost of making current quite near home. Now, however, every Pennsylvanian is interested in knowing the cost of producing power at the point where it can be produced at the lowest cost. This is because current made at any point within the Commonwealth can now be transmitted to any other point with a loss so small as to be negligible in the rate charged."

The Inter-State Milk Producers Association and other organizations have been receiving a great many complaints from all parts of the state as to the difficulty of securing electric power on the farm, also with regard to the cost of installation, particularly of the lines through the country from farm to farm. There has been a remarkable variation in the cost of the current in various parts of the state. For instance, in some neighborhoods the cost is fifteen cents per kilowat hour, while not far away in an adjoining neighborhood, the price is as low as eight cents per kilowat hour.

There is no group of farmers more interested in having the convenience, safety, comfort and efficiency of electric current on farms than our milk producers. They need artificial light in the barns for morning milking through a large portion of the year. An electric motor makes the very best source of power for running milking machines and for pumping water for the stock to drink and to cool the milk. An electric motor where the current is sufficiently cheap, is an efficient and economical source of power for grinding feed, threshing and filling silos. The many household uses to which electricity can be put hardly need be enumerated now in a discussion of this kind. Everyone knows how much "mother" appreciates her electric iron, vacuum cleaner, and the electric motor of the washing machine and sewing machine, not to mention the convenience of turning a button every time you go down the cellar in place of fumbling around in the dark.

Since electricity is a force with which he has been relatively unfamiliar, the farmer has perhaps been rather slow to insist upon equality of opportunity to share in its blessings. He has been content to get along with the old hand pump until he could get a gasoline engine, then to worry with the starting and stopping of it for years because he had never had called to his attention the possibility of having his water pumped by power derived from coal mines or water power hundreds of miles away. Many up-to-date farmers have installed the individual farm lighting systems with all its care and expensive equipment because they had given up hope of ever having electric current from a large central power plant, but they are becoming aroused to the fact that in large portions of Pennsylvania there are districts where every farmer should have access to an electric power system and where the cost of such power should be readily within their means. Our farm leaders are coming to feel that the time is now here when electric light and power should be as plentiful on our farms as the telephone and the automobile and that it should be within the reach of a great many who have been told that they could never expect to have electricity in their neighborhoods.

The present network of electric lines throughout Pennsylvania has been one of gradual development without intelligent planning. Companies have received franchises, amalgamations have been effected, territory has been developed as this or that of the other public utility company has thought it an opportunity to enlarge its field. Many neighborhoods are without the opportunity to have electricity simply because of lack of initiative or financial stability on the part of the company that has the exclusive franchise to serve the consumers of that locality. In some of these cases, a high power electric line passes directly through a neighborhood, the inhabitants of which have been denied the right to secure current from it because the franchise to sell current in that community was held by a rival company which either could or would not extend its lines.

No one is directly responsible for this condition, but like Topsy, "It's just grown up" and in thus frankly discussing it, we wish to blame no one. The time has come when we should know enough about electricity, its transmission and its uses, to give an intelligent answer to many of these questions and to discuss the development of electric lines throughout rural sections from the standpoint of the interests of the public as a whole. The standardization of rates should be similarly effected through intelligent study of the question from every angle, just as railroad rates had to be standardized for the best interests of the public at one stage in the development of our marvelous railroad system. It would be useless to try to imagine what the future holds in store if the great resources of the State of Pennsylvania are developed and made available for its people, both city and country.

The Philadelphia Electric Company, which supplies Philadelphia and vicinity with electric current, has just issued a booklet in which is described its wonderful growth in business and in net income during the past three years. The most interesting thing about the statement is the fact that during the same period there were three successive decreases in rates, thus making the power which they were producing available for an ever-increasing proportion of the industrial needs in that busy section centering around Philadelphia. Just what should be the relationship in cost of electric power in a thickly populated section as compared with a more strictly rural section is a matter about which the engineers will doubtless tell us when the proper time comes. It is very interesting to note that in Ontario, Canada, which obtains its power from the Niagara Falls and other water power, the power is transmitted 100, 200 and even 250 miles without increasing its cost per kilowat hour to anything like the prices paid all over Pennsylvania, and the superintendent of the municipal plant at Seattle, Washington, testifying recently before a Senate Committee, stated that both commercial and municipal plants in Washington State were distributing electricity throughout the country districts at prices which would seem very low, even to a city dweller, in Pennsylvania.

STATE CONSERVATION COUNCIL ADDS COMMITTEE ON FARMING

At the annual meeting of the State Conservation Council held May 23-24, 1924, at State College, Penna., Robert M. Carrons, of Washington county, introduced a resolution asking that a State Conservation Committee on Farming be established. This resolution was approved unanimously by the hundred delegates present representing forty-five state and county organizations interested in conservation.

This committee on farming is a natural outgrowth of the interest taken by farmers in the work of the council. The Pennsylvania State Grange is one of the original member organizations. Through the efforts of the council legislation was secured the last session of the legislature assuring the farmers of the states greater protection to his property from hunters and fishermen and greater safety to his family and cattle.

This committee will bring together all organizations in the state interested in agriculture including the State Grange, the Farm Bureau, Agricultural Extension Service of State College, etc.

The members of the State Conservation Committee on Farming are:
Miles Horst, Harrisburg, Pa. Chairman
Robert M. Carrons, Washington, Pa.
Mrs. John F. Hice, Wilmore, Pa.
Frank Moore, Rome, Pa.
Madge T. Bogart, State College, Pa.

That neglected woodlot, if cleared of crooked, defective, and weedy trees may sometime return a good profit.

Tin cans have their place, but their place is not in the back yard, half full of water and serving as happy homes for mosquitoes.

THE DAIRY COW

When the cows are turned on pasture continue to give them a small amount of grain. If you have good cows, they will pay for this feed later in the season by a larger milk flow when the pastures get short and dry.

RURAL ELECTRIC SERVICE COMMITTEE

Authorized by the Pennsylvania State Council of Agricultural Organizations

The directors of the Pennsylvania State Council of Agricultural Associations at a meeting held in Harrisburg, Pa., on June 19th, authorized and appointed a Rural Electric Service Committee to investigate and obtain information regarding rural electrical service and to present the question before the Pennsylvania Public Service Commission, which body has voluntarily arranged for hearings on this important subject.

The first hearing of the Public Service Committee will be held on July 9th on the question of rural electric facilities, service and standards, offers to the farmers an unusual opportunity to present their needs for adequate electric service at reasonable rates. Today about one-half of the population of Pennsylvania are unable to get electrical service and much more than one-half of the territory of the state is not reached by any electric distribution lines.

Where a farmer seeks to obtain electric service the company usually insists on his paying the entire estimated cost of construction of the necessary extension of its lines, or a very large part of it. How much the farmer pays has often depended on how much influence he happens to have. The result has been that the average farmer has been required to pay exorbitant amounts to obtain electrical service and has therefore been forced to do without it.

The rates charged for current have also varied greatly, but are practically always much more than city rates.

To protect the interests of the rural consumer in the hearings about to be held by the Pennsylvania Public Service Commission the Pennsylvania State Council of Agricultural Organizations has appointed a Rural Electric Service Committee, composed of Morris T. Phillips, president Pennsylvania State Council of Agricultural Associations, chairman; Fred Brenckman, secretary Pennsylvania State Grange, secretary; H. D. Allebach, president Inter-State Milk Producers Association, treasurer; P. S. Brenneman, Dairymen's Co-operative Sales Co.; John A. McSparran, Master Pennsylvania State Grange; John G. Miller, Pennsylvania Farmers Co-operative Federation, and (one to be named) and a Publicity Committee composed of Fred Brenckman, Grange News; H. I. Berlovich, Dairymen's Price Reporter; Miles Horst, Stockman and Farmer; R. P. Kester, Pennsylvania Farmer, and August A. Miller, Milk Producers Review.

The committee has retained as counsel Harold Evans, of Philadelphia, who was assistant counsel for Morris L. Cooke in the Philadelphia Electric Rate Case, which resulted in a reduction of rates in Philadelphia of a million dollars a year.

The scope of the hearings which commence on July 9th has not been determined, but it is expected that the commission will consider among other things:

(1) What are proper rural electrical serivce standards—such as voltage, fluctuation, etc.

(2) What is the proper basis of a rural electric schedule of rates.

(3) What is the fair cost of rural electric service, including (a) the cost of extensions and (b) the cost of distributing current.

(4) What portion, if any, of the cost of rural extensions should be borne by the consumer.

The committee needs all the information possible regarding electric rates and extra charges. If you have any information that may be of value in the furtherance of this movement, write the secretary, Fred Brenckman, Telegraph Bldg., Harrisburg, Pa.

The work of financing this important adjustment in rates and service requires immediate action. We are confronted by the various large utility organizations and we must be prepared to defend our position.

Herewith is enclosed a subscription blank which you may fill out. Enclose check or money order and address to the treasurer, H. D. Allebach, Boyertown Bldg., Philadelphia, Pa.

SUBSCRIPTION

RURAL ELECTRIC SERVICE FUND
To H. D. Allebach, Treasurer
Rural Electric Service Committee
BOYERTOWN BLDG., PHILADELPHIA

Enclosed please find my subscription for use of the Rural Electric Service Committee of the Pennsylvania State Council of Agricultural Organizations, to be used in defraying expenses involved in the investigation and preparation of data to be used in furthering the interests of farmers in connection with hearings to be held before the Public Service Commission of the State of Pennsylvania.

Name.....

Post Office.....

County.....

State.....

Amount Subscribed $.....

FARM BUTTER PRODUCTION IN PENNA.

Pennsylvania farmers have decreased the production of farm butter more than 58 per cent. in the last 44 years.

In 1879 the production of farm butter in that state was 79,335,012 pounds, while in 1923 the output was 34,909,640 pounds.

The various ten year records were as follows:

1879—79,336,012	1909—61,158,115
1889—76,809,041	1919—38,468,605
1899—74,221,085	1923—32,909,640

During this same period the estimated number of dairy farms on Pennsylvania farms was as follows:

1879— 854,156	1909—933,640
1889— 927,254	1919—885,855
1899—1,022,074	1923—862,835

While the large falling off in butter is noticed, it will also be noted that there has been very little variation in the number of dairy cows on farms.

Between 1909 and 1919 there was a very rapid extension in the manufacture of condensed and evaporated milk. In 1909, twenty-six million pounds were condensed, and in 1919, ninety-nine million pounds. In 1914, seven million pounds were evaporated and in 1919, ninety-five million pounds.

Large quantities of butterfat are now consumed in ice cream making.

While the quantity of dairy cows on farms does not show any wide variation, the production per cow has been steadily increasing.

In the large cities in the state consumption of fluid milk has been steadily increasing, particularly where efficient production and marketing methods, together with proper sanitary regulations, both on farms and city distributors plants, have become the practice.

FIGURES SHOW INCREASE IN USE OF MILK AND CREAM

The American appetite for milk and cream goes on increasing. A survey recently completed by the Bureau of Agricultural Economics, United States Department of Agriculture, shows that the per capita consumption of fluid milk for 1923 was 53 gallons, which figures out to 1.16 pints daily for each person. In 1922 the per capita consumption was 50 gallons; and the year before it was 49 gallons.

The statement has often been made that farmers who produce milk for the market sell practically all of it and do not use as much in their homes as do city people. The survey showed the contrary—that on farms with producing cows more milk and cream were consumed than by city families. The farm figures were obtained from 30,000 individual farms and represent the most comprehensive survey of the kind ever made. The city figures were obtained principally from boards of health and covered 30 cities having a total population of about 25,000,000 persons.

The average daily consumption of milk and cream on farms where producing cows were kept was found to be 1.78 pints per person in 1923. On farms having no cows or on which nonproducing cows were kept, the average daily consumption was 0.775 pint. The city average was 0.87 pint.

Editors note—The increase in the consumption of milk in urban districts and on the farm is very gratifying. In some surveys made in this vicinity a year or so ago, opposite results were brought out.

It is a wise woman who saves the water from cooked rice, macaroni or vegetables and uses it in soups and sauces.

FOOD PROSECUTIONS IN PENNSYLVANIA

The Bureau of Foods, Pennsylvania Department of Agriculture, ordered 211 prosecutions for violations of the food laws during April, according to a report to F. P. Willits, Secretary of the Department, by James Foust, the Bureau's director. During the corresponding month of last year there were 34 prosecutions.

One hundred and seventy of the cases came under the head of general food act regulations, and 15 under provisions of the law prohibiting addition of chemicals to ground fresh meat. Fourteen of the latter violations occurred in Allegheny County.

Receipts of the Bureau for the month totaled $4,969.17, as against $3,105 in April, 1923. Oleomargarine licenses netted the Bureau $1,924.17, and food fines netted $1,600. The total receipts during the first four months of the year are now about $393,384, including all license fees and fines.

The report pointed out the fact that Pennsylvania's food supply is uniformly of high standard, that there are comparatively few violations of the pure food laws, but that the Bureau is constantly on the alert to drive from the markets substances that are unwholesome and unfit for consumption. The field agents are specially trained to search out and purchase the food products of doubtful nature.

GROWING DAIRY CALVES

During the summer months dairy calves over six months old can be kept on pasture. When the pastures become short, they should have some hay and grain. A good grain mixture consists of corn meal 500 pounds, oats 200 pounds, bran 200 pounds, and oil meal 100 pounds.

OUTSTANDING HOLSTEIN-FRIESIAN COW

(Illustrated on page 1)

The only cow in the world with four seven-day records averaging over 40 pounds of butter and with three ten-months records each over 1,000 pounds of butter has just completed a yearly record which makes her one of the four leading Holstein producers in the United States. She is Bess Johanna Ormsby, owned by Winterthur Farms at Winterthur, Delaware, who in 365 days produced 30,143.3 pounds milk and 1,195.09 pounds butterfat—equal to 1,497.6 pounds butter. Her sire, Pietertje Ormsby Mercedes, is one of the breed's outstanding sires of big producers and show ring winners, and her dam, Spring Brook Bess Burke 2d, is the only cow in the world with four yearly records each over 1,000 pounds butter made in connection with four seven-day records each over 30 pounds butter.

She freshened at eight years of age weighing 2,000 pounds. At the finish of her year's work she weighed slightly over 1,700 pounds. She received from 15 to 20 pounds a day of a grain mixture made up of 200 pounds bran, 200 pounds ground oats and 45 pounds each of hominy, oil meal, distillers grains and gluten. In addition, she consumed daily 8 pounds corn silage, 5 pounds beet pulp, 15 pounds hay and 40 pounds beets. During the summer season beets were replaced with 40 pounds of a soiling crop. She was kept in a box stall throughout the year. During the summer months she was allowed the run of a small grass paddock for about six hours each day, and was out in an exercising paddock for about two hours every day during the winter. She was never off feed during the entire period.

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Editorial

Consumption of fluid milk, cream and ice cream has been decreasing while the current supply shows little, if any, decrease.

Buyers have requested some adjustment in milk prices in order that they might meet these conditions.

After conferences with the officers of the Association a basis of adjustment was proposed whereby the advance in the customary quantity of basic milk during the summer months be eliminated.

The officers of the Association have taken a mail vote of its directors and on receipt of a favorable reply have agreed to the reduction of the usual ten per cent. in the volume of the basic supply, beginning with July.

The present prices will be paid for straight basic milk, until further advised. All milk in excess of the established basic will be paid for on surplus basis, that is New York ninety-two score butter plus twenty per cent.

THE MARKET FOR MILK

General conditions during June were not particularly favorable to milk consumption. Cool and unseasonable weather held down the demand. Ice cream consumption was far below the average.

On the other hand production increased and it has been extremely difficult to find new buyers or to have present buyers take on any additional milk during the month.

Notwithstanding these conditions prices have been maintained at an unchanged basis for the regular supplies of fluid milk.

In condensing districts slighlty lower prices have ruled for several months, due to competition from lower price territories in the evaporated and condensed milk markets.

Excess milk has been taken by some buyers at prices that would enable them to use the milk for the manufacture of butter and other products.

The butter market has been gradually gaining strength with prices on a fairly even basis. Early in June 92 score solid packed creamery butter sold at 40 cents, New York City. At the close of the month quotations were 40¾.

We hope that conditions will be such that prices will continue to be uniform and we can maintain our present prices throughout the year, but there are certain well recognized conditions now in the industrial world that we must not disregard. If this continues, and industrial stagnation should become much greater than it is now, the consumption of milk will be so affected that it is going to be a serious question whether or not our hopes can be fulfilled.

READING MILK SUPPLY

One of the things in which Reading takes a pride is the quality of the milk supplied its citizens. It was not always thus, for before the introduction of pasteurization and the rigid inspection which this important food product now undergoes, it was ladeled out to customers with a dipper from cans not overly clean, and it had a high water content supplied by wells of suspicious purity.

Today both producers and dealers are subject to strict regulations, all of which make for a purer product and greater safeguard to public health. These two co-operate with the health authorities in adhering to the regulations. It would be a splendid thing if all other producers of food products were as conscientious in their dealing with the public as are the producers and dealers in milk.

At a meeting of the latter in this city the other day, at which the municipal health officer was present, steps were taken looking for further improvement in the sanitary conditions surrounding the handling of milk which is distributed in Reading and surrounding territory. The action is all the more commendable because it is a voluntary one on the part of those interested, and taken at the suggestion of the state organization.

One result of the improved methods of handling milk in this city is a tremendous increase in the quantity consumed compared with former years. To some extent this may be attributed to the normal growth in population, but it is due more largely to the improvement in quality and the confidence which the public now has in those who prepare it for household use.—(Reading Times.)

INTER-STATE TESTERS HOLD CONFERENCE

The testing forces of the Inter-State Milk Producers Association held their bi-monthly conference, with the officers of the Association, on June 28th, at the Philadelphia headquarters.

These meetings are particularly valuable in that they give the officers a direct contact with conditions in the field and also permit the testing forces to obtain direct the general conditions and policies of the organization.

In addition to the entire testing forces the conference was attended by H. D. Allebach, president; Frederick Shangle, vice president; R. W. Balderston, secretary, A. A. Miller, editor The Milk Producers Review, and C. I. Cohee, Director of the Quality Control Department of the Philadelphia Inter-State Dairy Council.

RURAL ELECTRIC SERVICE COMMITTEE

In another column we have outlined the formation of the Rural Electric Service Committee of the Pennsylvania State Council of Agricultural Organizations and the field and scope of its work.

As this movement is primarily in the interest of country and small town people, we believe that financial support on the part of our Pennsylvania readers for the work of this committee should be generally and liberally given.

A subscription blank is printed in connection with the article on page 3. We know that you are interested in this movement—send your subscriptions in at once.

HOME MADE FLY SPRAY

The following formula for the mixing of a homemade fly spray has been given by the Pennsylvania State College, Division of Agricultural Extension.

1½ qts. any coal tar dip
1½ qts. fish oil
1 pt. oil of tar
1 qt. coal oil
½ pt. oil of penyroyal

Mix in 10 gallons of luke warm soft water in which a bar of laundry soap has been disolved. Spray twice a day in the morning after milking and in the afternoon when cows are brought in for silage or green feed.

The following is a spray mixture recommended by the Iowa Station, which is very efficient and yet cheap:

4½ qts. coal tar dip
4½ qts. fish oil
3 qts. coal oil
3 qts. whale oil
1½ qts. oil of tar
3 lbs. laundry soap

Dissolve the soap in water and add the other ingredients, mixing thoroughly. Bring the whole up to 30 gallons by adding luke warm soft water. This spray will not injure the coats of the animals as many others sprays do.

It is recommended to spray twice daily, once in the morning after milking and again in the afternoon. It can be applied with an ordinary spray pump, a large barrel spray pump being the most efficient as with it two men can spray 40 cows in five minutes. Thirty gallons will spray 40 cows twice daily for ten days at a cost of 1 cent per head per day.

STUDENT WINNERS IN DAIRY SHOW ANNOUNCED

The winners in the annual dairy fitting and showing contest and mock sale, staged by the Dairy Husbandry Club at the Pennsylvania State College, have just been announced by the dairy husbandry department.

R. W. Eno of Honesdale, was awarded a silver cup for being the grand champion showman. He fitted and showed the Ayrshire herd sire, Penhurst David. Champion in the Holstein classes went to B. S. Weiler of Warren on the two-year-old, Weiler Farm Yankee Beauty. In the Jersey classes, C. J. Waybright of Gettysburg took first on Oxford Barzie and J. P. Gruber of Shippenville won the Guernsey classes. The winner in each breed was donated a year's subscription to the breed magazine by the respective breed associations.

Following the judging, the animals were sold in a mock auction sale to test the ability of the students to value dairy cattle. The student bids tallied very closely with the valuations made by faculty members before the sale.

DIRECTORS' MEETING

The regular meeting of the Board of Directors of the Inter-State Milk Producers' Association was held at its headquarters in Philadelphia, on Monday, June 30th.

Of the total number of 24 directors, 21 were in attendance or had representatives present.

Formal reports were made by the secretary and treasurer, and their reports approved.

A very complete report of the work of the field men and testing forces of the Association was made by F. M. Twining. In the period covered, extending from March 21st to May 31st, 11,547 check tests of members' milk were made.

C. I. Cohee, Director of the Quality Control Department of the Dairy Council, reported on the work done in connection with the enforcement of the Sanitary Milk Regulations. Co-operating dealers are adhering closely to the letter and spirit of the regulations and where farmers have not obtained temporary permits they have refused to continue taking their milk supply.

In consideration of the number of temporary permits issued, the number of producers whose milk was refused was relatively small. The co-operation of the farmers and dealers in this important work has been extremely gratifying.

Reinspection for permanent permits will begin early in July.

R. W. Balderston explained at length the Pennsylvania Giant Power Electrical Survey and the proposed work of the Rural Electric Service Committee of the Pennsylvania State Council of Agricultural Organizations, in connection with its work before the Pennsylvania Public Service Commission, which would not only have a material bearing on electric service in that State, but would also have a very marked effect on the rural electric situation in the States adjoining Pennsylvania.

The matter of price differentials for butterfat content was discussed and will be further considered at the next meeting of the Board.

H. D. Allebach, president, presented a very complete survey of the general milk market and outlined future policies for the Association.

Unusually interesting reports were made as to market conditions in various portions of the Milk Shed by each director present, so that a very complete view of market conditions in each territory were available.

SPEND A WEEK IN DAIRYLAND

The Publicity Committee of the National Dairy Exposition, after consulting with various Milwaukee and Wisconsin people interested in the success of the Exposition, has just announced the new slogan for the year—"Spend a Week in Dairyland."

From all over the country information comes to the Exposition office regarding plans for trips and excursions to Milwaukee, which will not only include a visit to the Exposition but also a visit to Wisconsin's farms and factories, of which dairymen everywhere have heard so much. "Spend a Week in Dairyland" will appeal to every progressive dairyman who wants to visit the Exposition and at the same time see some of the famous farms and dairy plants of the great Wisconsin dairy territory. The slogan holds forth promise of a pleasant and profitable sight-seeing trip combined with real value from contact with the American dairy industry in all its many angles, as presented in the Annual Exposition.

LATEST MARKET PRICES

Philadelphia Selling Plan

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1924. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1923.

Beginning with January milk will be paid for on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount will be paid for on the average New York 92 score butter price for the month, plus 20 per cent. Milk in excess of an amount equal to the basic quantity will be paid for on a flat average New York 92 score butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

JUNE BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

JUNE BASIC MILK
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

JUNE SURPLUS PRICES
F. O. B. Philadelphia

Test per cent.	Class I per 100 lb.	per qt.	Class II per 100 lb	per qt.
3.	$2.13	4.55	$1.80	3.85
3.05	2.15	4.6	1.82	3.9
3.1	2.17	4.65	1.84	3.95
3.15	2.19	4.7	1.86	4.
3.2	2.21	4.75	1.88	4.
3.25	2.23	4.8	1.90	4.05
3.3	2.25	4.8	1.92	4.1
3.35	2.27	4.85	1.94	4.15
3.4	2.29	4.9	1.96	4.2
3.45	2.31	4.95	1.98	4.25
3.5	2.33	5.	2.00	4.3
3.55	2.35	5.	2.02	4.3
3.6	2.37	5.05	2.04	4.35
3.65	2.39	5.1	2.06	4.4
3.7	2.41	5.15	2.08	4.45
3.75	2.43	5.2	2.10	4.5
3.8	2.45	5.25	2.12	4.55
3.85	2.47	5.3	2.14	4.6
3.9	2.49	5.35	2.16	4.6
3.95	2.51	5.4	2.18	4.65
4.	2.53	5.4	2.20	4.7
4.05	2.55	5.45	2.22	4.75
4.1	2.57	5.5	2.24	4.8
4.15	2.59	5.55	2.26	4.85
4.2	2.61	5.6	2.28	4.85
4.25	2.63	5.65	2.30	4.9
4.3	2.65	5.7	2.32	4.95
4.35	2.67	5.7	2.34	5.
4.4	2.69	5.75	2.36	5.05
4.45	2.71	5.8	2.38	5.1
4.5	2.73	5.85	2.40	5.15
4.55	2.75	5.9	2.42	5.2
4.6	2.77	5.95	2.44	5.25
4.65	2.79	6.	2.46	5.25
4.7	2.81	6.	2.48	5.3
4.75	2.83	6.05	2.50	5.35
4.8	2.85	6.1	2.52	5.4
4.85	2.87	6.15	2.54	5.45
4.9	2.89	6.2	2.56	5.5
4.95	2.91	6.25	2.58	5.55
5.	2.93	6.3	2.60	5.6

JUNE SURPLUS PRICE
Country Receiving Stations

Test	Class I per 100 lb.	Test	Class II per 100 lb.
3.	$1.55	3.	$1.22
3.05	1.57	3.05	1.24
3.1	1.59	3.1	1.26
3.15	1.61	3.15	1.28
3.2	1.63	3.2	1.30
3.25	1.65	3.25	1.32
3.3	1.67	3.3	1.34
3.35	1.69	3.35	1.36
3.4	1.71	3.4	1.38
3.45	1.73	3.45	1.40
3.5	1.75	3.5	1.42
3.55	1.77	3.55	1.44
3.6	1.79	3.6	1.46
3.65	1.81	3.65	1.48
3.7	1.83	3.7	1.50
3.75	1.85	3.75	1.52
3.8	1.87	3.8	1.54
3.85	1.89	3.85	1.56
3.90	1.91	3.9	1.58
3.95	1.93	3.95	1.60
4.	1.95	4.	1.62
4.05	1.97	4.05	1.64
4.1	1.99	4.1	1.66
4.15	2.01	4.15	1.68
4.2	2.03	4.2	1.70
4.25	2.05	4.25	1.72
4.3	2.07	4.3	1.74
4.35	2.09	4.35	1.76
4.4	2.11	4.4	1.78
4.45	2.13	4.45	1.80
4.5	2.15	4.5	1.82
4.55	2.17	4.55	1.84
4.6	2.19	4.6	1.86
4.65	2.21	4.65	1.88
4.7	2.23	4.7	1.90
4.75	2.25	4.75	1.92
4.8	2.27	4.8	1.94
4.85	2.29	4.85	1.96
4.9	2.31	4.9	1.98
4.95	2.33	4.95	2.00
5.	2.35	5.	2.02

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations

1924	Average per month Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51
June	1.95	1.62

JULY PRICES
F. O. B. PHILADELPHIA
Country Stations

The same prices for basic milk as quoted above under June apply in July, subject however, to change whenever warranted by market conditions.

JUNE BUTTER PRICES
92 Score Solid Packed

	Phila.	New York	Chicago
2	41	40	38 1/4
3	41	40	38 1/2
4	41	40	39
5	41	40	39
6	41 1/2	40 1/2	39
7	41 1/2	41	39 1/2
9	42	41 1/2	39 1/2
10	42	41 1/2	39
11	42	41 1/2	39
12	42 1/2	41 1/2	39
13	42 1/2	42	39 1/2
14	43	42 1/2	40 1/2
16	43	42 1/2	40
17	42 1/2	42	39
18	42	41 1/2	38 1/2
19	42	41 1/2	39
20	42 1/2	42	40
21	43	42 1/2	40 1/2
23	42 1/2	42 1/2	40 1/2
24	42 1/2	42 3/4	39 3/4
25	42	42	39 1/4
26	42	41 1/2	39
27	42	41 1/2	39
28	42	41 1/2	39
30	41	40 3/4	38 1/2

CO-OPERATIVE PICNIC

Through the courtesy of the Westtown School, the office and field forces of the Inter-State Milk Producers Association and the Philadelphia Inter-State Dairy Council held a co-operative picnic on the school grounds, at Westtown, near West Chester, Pa., on Saturday afternoon, June 21st.

The one outstanding feature of the picnic was a baseball game between the Milk Producers and Dairy Council forces. It was a spirited contest. The Milk Producers Association team was victorious by a score of eight to three.

Swimming and canoeing on the school lake were enjoyed by all. A picnic supper followed.

The dairyman who feeds legume hay has the laugh on the fellow who feeds timothy, when he figures up his feed costs.

Your Bank Balance and the Concrete Silo

A good silo means a good supply of succulent fodder. That, in turn, means more and better milk during the winter months. And you know how that helps to fatten your bank balance.

A Concrete Silo is a good silo all the way up and all the way 'round. It is fireproof. It is windproof. It is built to last.

Reasonable in first cost, and free of maintenance expense, it is the last word in silo economy.

Our free booklet tells you all about Concrete Silos. Ask for booklet F-2. Write for it today.

PORTLAND CEMENT ASSOCIATION
1315 Walnut St. PHILADELPHIA
347 Madison Avenue NEW YORK
Union Trust Building WASHINGTON, D. C.

A National Organization to Improve and Extend the Uses of Concrete

Offices in 30 Cities

BOARD OF HEALTH BACK OF SANITARY REGULATIONS

In the May issue of the Monthly Bulletin of the Department of Public Health of the city of Philadelphia, we find on page 51, the following extract regarding the sanitary regulations.

"The Inter-State Milk Producers Association has inaugurated a dairy farm inspection whereby it will inspect all dairies coming under its control. This form of inspection at the source of supply has been sorely needed and there is no doubt that a marked improvement in the milk supply will be shown. The Board of Health has assured them of its hearty support and this division (Division of Food Inspection, Milk Inspection) will do all that is possible to co-operate with their association."

In connection with milk inspection, this division has supervision over all eating places and these are inspected regularly as to quality of food stuffs and general sanitary surroundings.

Swapping quarters for dollars is the way one farmer describes growing legumes; he says he gets a dollar in soil improvement for every quarter he spends.

The Bestov Calendar

Equipment to handle milk from cow to consumer

The Bestov Cooler Will Not Develop Trouble

Guaranteed not to leak

Built for 150 lbs. water pressure

Made of solid copper and bronze, heavily tinned

No repairs—no wear

Sixteen seamless tubes united to form two unbroken cooling and aerating surfaces

Send for specification and price sheet

Cherry-Bassett-Winner Company

1918 Market St., PHILADELPHIA 33 So. Charles St., BALTIMORE

Special Sanitary Strainer

This strainer is made with seamless drawn steel bowl, heavily tinned. A removable disc of perforated tin rests on a shoulder in base of strainer (see illustration) On this metal disc is placed a filtering cotton disc made especially for this strainer. Then on top is placed another metal perforated disc, all of which is kept in place by means of a spring wire. All parts accessible for easy washing. Throw the cotton disc away after each milking. Capacity of bowl 12 qts.

Price Each $1.75 Complete

Package Cotton Discs (25 in package) $0.25

Carton Cotton Discs (300 in carton) $2.50

Add 10c for Strainer and Discs by Parcel Post

E. A. KAESTNER

516-524 N. Calvert Street, Baltimore, Md.

Manufacturer of

Dairy Supplies and Dairy Equipment "The Dairy Supply House"

Write for "DAIRY FARM CATALOG." You will be interested in its contents

FARMERS DAY AT STATE COLLEGE

Farmers' Day held at State College, June 12, was the most successful ever staged since the event was made an annual feature. It is estimated that at least 3,000 people visited the college farms from the opening meeting on Wednesday evening to the auction sale of dairy calves which was the closing event on the following day.

The farmers' dairy cattle judging contest was the feature of the day. Sixty-five men from all sections of Pennsylvania competed for the purebred dairy calf which was awarded the winner by the dairy department. Classes of the four leading dairy breeds were placed by the contestants. The winner of the contest was E. R. Loy, a Holstein breeder of Perry county. Second place went to S. Chaplin of Centre county, followed by George H. Ritter of Perry county, Paul McBride of Beaver county and John K. Yoder of Mifflin county.

The program for the day included demonstrations and lectures on every phase of agriculture, tours of the college farms, inspection of the experimental plots, and an hour of games and contests. The five state-wide judging contests with 75 teams of three boys each entered, were run off during the forenoon. Six purebred dairy calves were sold at auction late in the day.

Features of the program that attracted special attention were a display of dairy utensils, a potato and grain grading demonstration, a talk on determining the age of horses, and an inspection of the newly arranged poultry plant. Hundreds of farm women attended the program which was arranged for their benefit. The model kitchen was the mecca for women and girls throughout the day and demonstrations on canning and the use of the steam pressure cooker were very well received.

The detailed winners of the five contests are as follows:

Swine judging contest—cup presented by Northumberland County Duroc Breeders' Association, won by Jefferson county (Herbert Steele, Emory Mohney, Russell Britton); second, Cumberland county; third, Franklin county. Russell Britton was high individual scorer. Sixteen teams entered.

Crop judging contest—cup presented by National Stockman and Farmer, won by Bradford county (Clyde Burnham, Burton Hagar, J lm Brackman); second, Cumberland county; third, Huntingdon county. Clyde Burnham was high scorer. Ten teams entered.

General livestock contest—cup presented by the Pennsylvania Breeders' and Dairymen's Association, won by Adams county (Clifford Bucher, Harold Wartz, Chester Garreterson); second, Mercer county; third, Erie county. Chester Garreterson was the high individual scorer. Ten teams entered.

Dairy judging contest—cup presented by the Pennsylvania State Bankers' Association, won by Jefferson county (Thomas Love, Ernest Corbin, Forest Hough); second, Clarion county; third, Bucks county. Paul Knowlden of Bradford was high scorer. Twenty-eight teams entered.

Poultry judging contest—cup presented by the Pennsylvania Farmer, won by Dauphin county (Jery Kaufman, John Smith, Stanley Weaver); second, Bradford county; third, Chester county. John Smith was the high scorer. Eleven teams entered.

THE MONEY VALUE OF A HIGH SCHOOL EDUCATION TO A FARMER

Many parents living in rural communities are doubtless debating whether they should send the boys and girls who completed the courses in the small district schools last spring to high schools this fall. One question they probably ask is: "Will it pay in dollars and cents?"

The United States Department of Agriculture and the various state agricultural colleges have made a number of investigations of the differences between the incomes of educated and uneducated farmers. All of these studies show that in the majority of cases the better trained farmers receive the better incomes. The results cited in the following studies are typical of these investigations:

The Department of Agriculture reports a survey of three representative areas in Indiana, Illinois and Iowa, which shows that tenant farmers with a high school education receive an average annual income of $526 a year more than the men with only a common school education. A college education will add to this average $453 a year making the income of college graduates $979 more a year than the labor earnings of the men with only a common school education.

Cornell University has estimated that a high school education is worth as much to a farmer as $6,000 worth of bonds bearing five per cent. interest, and that a college education is worth twice that amount.

Shall it be From Farm to College?

The school year has just closed and your boys and girls have finished their course in high school, been given their diplomas and you and they are justly proud of what they have accomplished. This is a critical time for them because what they do this summer will probably determine whether or not they will go to college, enter a trade, or drift along without trying to get additional training to make themselves more capable and better citizens. Do not wait until fall comes on to begin talking about what the boy and girl is to do this coming year. If he or she is to go to college, begin at once to learn all that you can about the colleges and universities which offer the courses in which the child is most interested. Send for catalogues, make inquiries, talk to graduates, and above all, get the confidence of your children so that they will talk with you freely about what they wish to do. Giving a boy or girl four years of college work means to many farmers considerable of a sacrifice and the loss of the companionship and help of their children; but, in most cases, if that sacrifice is made now, the future years will be richer for both parents and children in every way. Large numbers of young people who have graduated from the high school are lost to further education because not enough interest is taken in them and in their welfare. Be sure that you do not allow your children to drift.

SAVE THE WHEAT

The spring battle to "swat the moth" was well staged by farmers who cleaned old chaff and dirt from their barns. The next step was to line the grain bins with building paper or new boarding. Now, to make the campaign a complete success, early threshing, preferably in the field, is advised by State College plant insect specialists.

HEALTH SUGGESTIONS FOR SMALL CHILDREN

About 20 per cent. of the children in the public schools of America are poorly nourished

WHY?

Largely because of wrong health habits in the early years of the child's life—before he goes to school

GIVE YOUR CHILD HIS CHANCE FOR HEALTH

Every child under six years of age needs:

1. A regular examination at least once a year by a physician.
2. Correction of any defects the physician finds—as enlarged or diseased tonsils, adenoids and decayed teeth.
3. Daily attention to cleanliness of the skin and teeth.
4. Ten or twelve hours sleep every night—with windows open.
5. Two rest periods a day—1 hour in the late morning (better with clothes removed) and one-half hour's quiet after the noon meal and before the evening meal.
6. Play and exercise in the sunshine and fresh air every day.
7. Simple, wholesome food at regular hours—with emphasis on good mastication or chewing.
8. A natural bowel movement every day. Use no drugs or laxatives.

FOODS YOUR CHILD SHOULD HAVE EVERY DAY

One quart of milk, if possible.

Some fresh vegetables, especially green, leafy vegetables, as spinach, chard, beet tops.

Some fruit, cooked or fresh, as prunes, oranges, apples.

Cereals and bread, especially those made from the whole grain, like oatmeal, Ralston's breakfast food, wheatena, pettijohn, cornmeal and whole wheat, graham or rye bread.

Children under six should not have

Tea, coffee or alcoholic drinks	Salads
Sweet cakes or pastries	Rich foods of any kind
Soft drinks or soda water	Much meat
Candy or ice cream often	Fried foods

It is best to give the heavy meal in the middle of the day.

Fresh uncooked fruits should be added gradually—small amounts at a time. Better not to give them at night. Add all new foods gradually.

Use the cooking water of all fresh vegetables for soups or with the vegetable itself.

Philadelphia Child Health Society
(Formerly The Child Federation)
1506 Locust Street
(Member of Philadelphia Welfare Federation)

MILK PRODUCTION UP SEVEN BILLION POUNDS LAST YEAR

Milk production last year was seven billion pounds more than in 1922, according to reports to the United States Department of Agriculture. Production is placed at 109,736,062,000 pounds as compared with 102,562,221,000 pounds in 1922.

Consumption of milk for household purposes reached 50,440,000,000 pounds as compared with 46,672,560,000 pounds in 1922. There was manufactured 1,774,881,000 pounds of condensed and evaporated milk as compared with 1,431,349,000 pounds in 1922. The output of creamery butter was 1,252,214,000 pounds compared with 1,153,515,000 pounds the preceding year, and the total production of cheese of all kinds was 394,697,000 pounds compared with 369,980,000 pounds in 1922.

Consumption of butter on a per capita basis was 17 pounds per person last year as compared with 16½ pounds in 1922; consumption of cheese was 3.91 pounds per person compared with 3.74 pounds; condensed and evaporated milk 13.25 pounds compared with 12.69 pounds, and ice cream 2.66 gallons compared with 2.43 gallons in 1922.

Dried casein production more than doubled during the year, being 14,548,000 pounds compared with 6,927,000 pounds in 1922.

Items making up the total milk production for the two years are given in the subjoined table:

	1923—Pounds	1922—Pounds
Creamery butter	1,252,214,000	1,153,515,000
Farm butter	610,000,000	625,000,000
Cheese (all kinds)	398,947,000	374,980,000
Condensed and evaporated milk	1,774,881,000	1,431,349,000
Powdered milk	6,560,000	5,599,000
Powdered cream	328,000	118,000
Malted milk	15,331,000	13,659,000
Sterilized milk	80,000	330,000
Milk chocolate	149,500,000	100,000,000
Ice cream (gallons)	294,900,000	263,520,000
Milk for household use	50,440,000,000	46,672,560,000
Milk fed to calves	4,174,000,000	4,335,000,000
Milk wasted	3,292,000,000	3,076,860,000
Total (equivalent of whole milk)	109,736,062,000	102,562,221,000

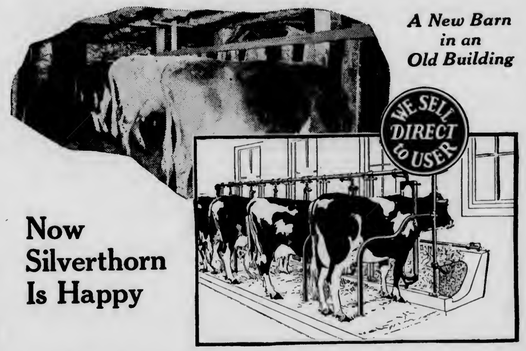
-Grass- is not enough!

Cows need more than green pasture, with its 70 to 80% water content, to stay at top-notch milk flow, health and condition. They need Larro too, because they cannot eat enough grass.

Feed Larro every day. Start now and insure, by the addition of the nutritious, high quality, well balanced materials in Larro, the continuous, profitable production which Larro *always* gives.

See your Larro dealer or write to us. Ask us to send you the Larro Dairyman, our free magazine for cow owners.

The Larrowe Milling Company
119 Larrowe Bldg. Detroit, Mich



A New Barn in an Old Building

Now Silverthorn Is Happy

HE had a fine herd of cows. He was proud of them. But when he wanted to show them to visitors and prospective buyers they didn't seem to show their value. They were in cramped quarters. His lighting, ventilation and stable arrangement was faulty. He knew this but wondered how he could have a better barn.

One day

He Sent for the Jamesway Book

"Helpful Hints on Building Dairy Barns"

He was surprised to learn how easily he could improve the old barn. No need for a new building. Just a simple change here and there—with sanitary, cow-comfort steel equipment, and behold! his old barn was a delight to bring folks into. This book gave him new ideas, helpful suggestions, and the Jamesway man in his county helped him to carry them out. His biggest surprise was to learn how little it all cost.

Suppose you too send and

Get this Book Yourself

It's filled with illustrations and blue prints. Shows drawings and photographs of old barns made new at low cost. Free to Dairy Farmers; to others, 25 cents in stamps. Get ideas on improving your barn. Write us what you have in mind. A post card will do. Write today.

James Mfg. Company

"Jamesway" ELMIRA, N. Y.

Ft. Atkinson, Wis. Minneapolis, Minn.

DAIRY COUNCIL SERVICE

The various departments of the Philadelphia Inter-State Dairy Council

Is Yours for the Asking Without Cost

You may have Lecturers and Speakers on Health or Nutrition Topics

MOTION PICTURE FILMS ON DAIRYING SUBJECTS

PLAYS FOR THE CHILDREN

LANTERN SLIDES, LITERATURE, POSTERS, ETC.

The Dairy Council has carried the message of "Milk for Health" to thousands of consumers and producers. Why not include those in your community?

There is no charge for this service for local I. M. Pa. Meetings, Community or Local Meeting in the Philadelphia Milk Shed

Let Us Plan Your Entertainment

Write for detailed information

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

MORE NEW JERSEY CITIES PLANNING FOR FARMERS' MARKETS

Farmers' markets, meeting an economic need of the consumers of the community and helping the grower to dispose of his products at a better advantage, are rapidly coming to the front as important municipal institutions in several cities. Buying fresh fruit and vegetables direct from the farmer is becoming an increasingly popular method of shopping for many housewives and it has been the activity of women's organizations in several towns that has caused officials to adopt an offical marketing program.

Vineland is one of the latest communities to plan an established farmers' market. At a recent conference one hundred farmers met the mayor and city officials, discussed the local needs and possibilities with Chief A. L. Clark, of the State Bureau of Markets, and agreed upon a plan for a retail market. To this, it is expected that a wholesale market will later be annexed.

In Camden, the Chamber of Commerce and farming organizations are considering a plan of converting the old Reading Terminal into an immense farmers' market. The idea is popular with Camden consumers and a definite method of conducting the institution without cost to taxpayers is under development.

One of the oldest and largest farmers' markets in the state is located in Burlington. For years it has met in the main business street, without ord·r or system. Prominent farmers supplying this market have recently asked the city to aid in establishing a modern and well regulated market. Council and the Chamber of Commerce, with the cooperation of state marketing officials, are working to this end.

Several of the largest cities of New Jersey boast of what are said to be among the best conducted farmers' markets in the country. Each year sees an improvement in the conduct of these institutions, in the quality of goods sold and in the service rendered to customers by business farmers.

NEXT DAIRY CONGRESS WILL BE HELD IN PARIS

Announcement has been made that the next Congress of the International Dairy Federation will be held in Paris, France, in June, 1925.

It is suggested that every American business man, scientist or educator, who may have any hope of attending the International Dairy Congress in Paris in June, 1925. communicate with Mr. H. E. Van Norman, 910 S. Michigan Ave., Chicago, president of the Worlds Dairy Congress Associations so as to keep informed as to the progress and plans for the Congress and of any American participation which may develop.

EGG PRODUCTION

Laying hens will tend to slump off in production in June, and the wide-awake poultrymen will endeavor to prevent this by forcing the flock to greater mash consumption. Grain should be decreased as it is fattening and does not promote high egg production. Some feed the mash moist by mixing a small quantity of the regular laying mash with skim milk. Give the hens what they will clean up in 15 to 20 minutes.

Aunt Ada's Axioms: Laughing at a child's fault one day and punishing it the next is no way to teach that consistency is a jewel.

INSPECTION OF CREAM

A very general impression exists, and we believe with good foundation, that the inspection of cream is to some extent neglected in many of our cities. It is true that milk is used in larger quantities than cream, both as children's food and in other ways; nevertheless cream is used so largely that it is an important factor in public health, and as such it demands the attention of the milk inspector.

Children do use cream to a considerable extent. Cream is used in the modification of milk for babies. Older children use cream on cereals, fruits, desserts, and in ice cream. Not only children, but also adults should be assured a supply of safe, unadulterated cream.

As with milk, there are two main factors to be taken into consideration in the inspection of cream; first, the sanitary features; and second, food values, or those things affecting the consumer's pocketbook.

The source of cream should be determined as carefully as that of milk. Cream should be very carefully produced from tuberculin tested cows, or be properly pasteurized, or both. During production, handling, and delivering, cream should receive the same care as milk. Heavy cream for whipping purposes is very often sold raw, and proper precautions should be taken to see that the quality is above suspicion. The practice of using old, returned milk, or milk of poor sanitary quality, as a source of cream should be discouraged.

From the chemical standpoint, there should be clearly defined and well enforced grades. There should be a fixed minimum standard for butterfat in light, table, or coffee cream, which is the usual cream of commerce. Such standard usually requires from 18 to 20 per cent. fat. Where so-called "double cream" is sold, it should contain at least twice the legal fat percentage of ordinary cream to avoid misbranding and deception. "Whipping cream" may contain less fat than "double cream," but according to a ruling, cream shipped interstate and labeled "whipping cream" must contain at least 30 per cent. butterfat.

It is believed that more attention might be paid to cream served in restaurants. When a customer pays for "cereal and cream," for example, he should receive legal cream.

Samples of cream should be collected regularly from wagons, depots, stores, and restaurants, and be subjected to careful chemical and bacteriological examination.

—Milk Inspector Letter No. 81.

STATE ENFORCING BAN ON METAL TAG FASTENERS

The campaign of the Bureau of Foods and Chemistry, Pennsylvania Department of Agriculture, against the use of metal tag fasteners for attaching shipping tags to sacks of cattle feed, is being pushed vigorously by the officials and the field agents.

According to Dr. J. W. Kellog, the Bureau chief, the danger of the metal fastener dropping into the feed and from there into the stomach of a highly-prized animal, with the possible loss of life, is too serious a consideration to permit other than a strict enforcement of this provision of the State's feeding-stuffs law.

In his monthly statement of activities Dr. Kellog reported several instances where prosecutions were brought against dealers who handled livestock feeds in sacks containing the unlawful metal fasteners.

PENNSYLVANIA A GREAT DAIRY STATE

Pennsylvania is a great dairy state, ranking seventh among all the states in the Union for dairy cows. Pennsylvania cows are better than the average since the state ranks fourth for milk production. According to the 1920 census the annual production of milk in the state was 421,631,355 gallons. If this amount of milk were all placed in quart bottles and stood side by side one would have a line of bottles that would reach around the world 4 4/5 times. It is amazing when one considers the tremendous amount of milk produced in this state, but still more surprising when one considers the amount of milk consumed in this state. Not only does Pennsylvania consume as much milk as it produces but in fact it consumes considerably more. The state is fourth for milk production but is second among all the states in the Union for the consumption. Pennsylvania is the third state in the Union for the farm value of its dairy products which amounts to nearly one hundred million dollars annually, exclusive of the milk and cream used in farm houses. The state ranks third in the condensed milk industry, with an output of 120 million pounds in 1922. The state also ranks high in the production of factory cheese and butter and is the second state in the Union in the manufacture of farm butter, with a production of over 38,000,000 pounds annually. In the manufacture of ice cream the state ranks first with a production of 30,250,000 gallons in 1922; outstripping its nearest competitor, New York state by 9,500,000 gallons.

This great industry calls for a large number of men for market milk and dairy manufacturing plants and also for a large number of well trained men for the management of dairy farms. The dairy course at the Pennsylvania State College has been one of the most popular courses in the School of Agriculture for the last few years. Ten different special courses are given in various lines of agriculture at the institution but over one-fourth of all the students in the School of Agriculture are taking the dairy course. Twenty-five men graduated in dairying at the June Commencement and practically all of these have accepted positions and many more positions were available than the supply of men to fill them.

PENNSYLVANIA STATE GRANGE TO MEET IN READING NEXT DECEMBER

The annual convention of the State Grange of Pennsylvania, it is announced, will be held in Reading, Pa., December 9th to 11th, 1924.

The place where this meeting was to be held was not decided at the Pittsburgh session last winter, the matter being left in the hands of the State Executive Committee.

Rajah Temple, where the sessions will be held, will easily accomodate the 2000 or more delegates who will attend the convention.

WATER FOR DAIRY COWS

One hundred pounds of average milk contains about 87 pounds of water. The dairy cow's water supply, therefore, demands the dairyman's most careful attention. Cows giving milk drink about four times as much water as dry cows. High-producing cows sometimes drink from 200 to 300 pounds of water a day. See that your herd is supplied with plenty of pure, fresh water this summer.

JAPANESE BEETLE MENACE CALLS FOR URGENT ACTION

Secretary F. P. Willits, of the Pennsylvania Department of Agriculture, has announced the plan of operation to be followed during second season of the Japanese beetle quarantine in this state. He said the quarantine on the movement of farm and garden products is to be enforced in a specified area in southeastern Pennsylvania from June 15 to October 15.

The beetle quarantine is conducted by the Pennsylvania Department of Agriculture in co-operation with the Federal, New Jersey, and Delaware Departments of Agriculture. In this state the area under supervision comprises Philadelphia county and designated portions of Delaware, Chester, Montgomery and Bucks counties.

Regulations provide this area may be extended or reduced as found necessary by the State Secretary of Agriculture. It is not expected, however, the territory will be reduced or extended this season unless there should be an entirely unexpected spread of the beetles in any direction.

Provision has been made for inspection and certification of farm products at convenient points in the general market area. It is planned to erect sheds or covered platforms so that the produce may be unloaded from trucks or other vehicles for inspection. If it is certified it will be permitted to be reloaded and moved to its destination outside the quarantined area. Competent and uniformed inspectiors will be provided to avoid undue delay and interference with the movement of perishable products.

Roads leading out of the quarantined area will be patrolled, as they were last summer. The patrol will be continued throughout the twenty-four hours of each day, thereby preventing the possibility of uncertified produce being carried outside the restricted district. State police will co-operate with the inspectors where they are needed.

The Japanese beetle is regarded as one of the most dangerous fruit and forage crop insects ever brought into this country. The pest cannot be eradicated by any practical means of control now known to the Federal or any State Department of Agriculture, and the authorities realize that unless strenuous efforts are made to hold the insect in check it may eventually extend its operations to every state in the Nation.

Existing farmers dairy products marketing associations are older on the average than either grain or fruit and vegetable organizations, according to statistics available. The average age of 906 dairy products organizations is 14½ years as compared with an average of 10 years for 2,677 grain associations, and 8 years for 616 fruit and vegetable organizations.

It is hard on the pasture and hard on the cows not to give the dairy herd any other feed.

Let your SILO pay its own way

WHY WAIT? Why try to get along without a silo—or with one that fails to provide you with an abundance of low-cost silage? Right now—without the least inconvenience—you can install a brand new Green Mountain Silo and let its money-earning efficiency keep pace with the small monthly payments provided by the new Green Mountain easy payment plan.

Your silo ought to be as permanent as your farm buildings

$11.55 UPWARD PER MONTH

pays for your silo before you know it. In a few months, without the inconvenience of a large outlay your silo will have paid for itself by its increased earnings over your present equipment.

A LIFELONG SILO

Permanence, convenience and efficiency have always been built into every Green Mountain. First of all they are built to STAY. The Green Mountain is not built to fit a price—but to give a long lifetime of perfect, sweet, milk-making silage at a low feed cost.

CREOSOTED STAVES. The heavy, carefully matched Green Mountain staves are dipped in creosote preservative. No painting required. Looks fine; wears well.

EXTRA HEAVY HOOPS. Green Mountain hoops are extra heavy, with oversize threads.

SAFE-LIKE DOORS. Multiple door bearings — like you see on a safe or refrigerator door.

WOOTEN RUNG LADDER. No iron to frost the fingers when you climb your Green Mountain silo.

RED GAMBREL ROOF Gives handsome appearance, extra capacity and long life.

REINFORCED ANCHORAGE SYSTEM. Novel anchorage prevents sagging or warping.

Write us today, stating number of cows, and we will send all information, booklets, etc., by return mail. You will see there are no strings whatever to this liberal monthly payment plan.

CREAMERY PACKAGE MFG. CO.
330 WEST STREET RUTLAND, VT.

GREEN MOUNTAIN SILOS

PAPEC Ensilage Cutters

Fill the highest silo without clogging the pipe; require less power and less labor. The positive Self-Feed saves one man and increases capacity. Simple, rugged construction assures long life with few repairs. Many are giving good service after ten years' heavy use. Every part is easy to get at and adjust. There are no worries and no delays when you put a Papec on the job. Nearly one third more farmers bought Papecs last year than the year before. State the size of your silo and ask for new catalog. We will also send U.S. Gov't Bulletin "Making and Feeding of Silage." Write today.
PAPEC MACHINE COMPANY
191 Main Street Shortsville, N.Y.

The Papec is made in four sizes: R-10, N-13, L-16 and K-19.

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY
PAINTS AND VARNISHES
Write for Color Cards and booklet "Paint Pointers"
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

Mention the Review When Writing Advertisers

Our Feed Pool is Going Big

Due to favorable early purchases and our options covering balance of estimated Pool tonnage, we are now able to guarantee a maximun price on all feed offered in the 1924-25 Feed Pool.

HERE IS THE PLAN

While our purchased supply lasts, we will book orders with the absolute guarantee that no matter how high the markets go *"your feed will will not cost you more than the maximum guaranteed price"* which price is today far below the present market.

Should the Pool price, when announced, be lower than the now guaranteed maximum price, you will be given the benefit of lower price.

Can You Afford to Miss This Opportunity?

Remember our tonnage is limited and as soon as it is all sold we will be compelled to withdraw our offer.

If you are not in daily touch with the Car Door Man in your territory, write

Pennsylvania Farmers' Cooperative Federation, Inc.
HEED BUILDING
PHILADELPHIA, PA.

SILOS

PHILADELPHIA (WOOD STAVE)
KEYSTONE (WOOD STAVE)
CENTURY (CEMENT STAVE)
UTILITY (GLAZED TILE)
RIGHT PRICE—TERMS—SERVICE
"When You Want a SILO See SCHLICHTER"

E. F. Schlicher Co.
10 S. 18th ST., PHILA.

WOOD TANKS
FEED TRUCKS

SILOS

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE
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BELL PHONE No. 1 WEST CHESTER, PA.

THE RIGHT MILK COOLER FOR FARM USE

NO MATTER what kind of water supply you have, we have the right Farm Milk Cooler to suit. Either gravity or pressure type. If you don't have running water, our Siphon system or our Circulating Pump will solve your problem. For fifty years we have been manufacturing high grade dairy equipment. **We'll show you how to keep your milk from 24 to 48 hours longer**, and we won't need to experiment at your expense. Our coolers are rust-proof and wear-proof. They are easily cleaned, for they have no corners. Prices range from $31.50 to $75.00 according to type and size. **A guarantee of complete satisfaction goes with each cooler. Tell us about your water supply, and we'll tell you how to get satisfactory results.**

Ask for free descriptive circular No. 12

A. H. Reid Creamery & Dairy Supply Co.
69th St. & Haverford Philadelphia, Pa.

CRUMB'S Chain Hanging **Stanchions**

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.

FOR SALE

One Model D Majannier Milk Tester equipped for 110 volt direct current. This machine has been used only a few months, is in perfect condition, and will sell at a bargain.

HERSHEY CREAMERY CO., Harrisburg, Pa.

SELECTING ANIMALS FOR THE DAIRY HERD

By E. B. FITTS
Pennsylvania State College

(Continued from page 1)

dairyman can control type and production in his future herd.

The safest method in sire selection is to choose a proven sire. By a proven sire we refer to one that has daughters in milk that carry the type desired and that are uniformly good milk producers. A sire continues to get the same general type of animals as long as he lives. By selecting a proven sire the dairyman eliminates much of the chance in breeding and thus insures the future.

Unfortunately, however, most sires find their way to the block before their qualities as breeders, either good or poor, have been demonstrated. The dairyman then must make his choice from among young untried sires. By careful, intelligent selection he can still eliminate much of the uncertainty. The old adage "like produces like" must ever be kept in mind. Select a bull of the breed desired, of good type and from a dam, granddams and families of good type and of proven high milk producing ability. Bulls inherit the milking qualities of the cows from which they came and pass these qualities on to their heifer calves. Study pedigrees and milk production records very carefully. The dairyman's whole financial future is at stake when selecting a sire. A good sire may increase production in the herd 50 to 100 per cent. An inferior one may decrease it by an equal amount.

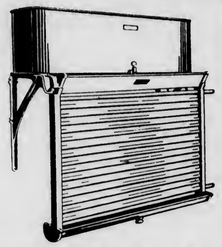
Purchasing Sires Co-operatively

The cost of a good registered sire often seems prohibitive to the man with a small herd. Where conditions such as this prevail two or more neighbors often combine in the purchase of a bull. Where there is community interest in better sires a bull association may be organized to purchase three or more bulls thus providing, through exchange, for several years service. Through partnership or association ownership of a high class sire the cost to the individual is often much less than ownership of an inferior or scrub animal. The County Agricultural Agent in any county can supply particulars regarding association purchase and exchange.

Dairying is an important industry and seems destined to increase in importance as time goes on. Dairy products are essential to human welfare. Good dairy cows well fed and handled have always been money makers for their owners. The future holds no thought of fear for the dairyman with a herd of cows possessing good working ability. To maintain and increase efficiency in the herd the dairymen must ever be selecting animals through keeping records of production of his cows, weeding out the poorer ones and replacing each successive sire with one of greater merit. —Radio talk from station KDKA, Pittsburgh, Pa.)

The telephone is finding a more important place in Pennsylvania farm life each year. Reports for 1923 point out that 60 per cent of the State's agriculturalists enjoyed the convenience of telephone service. In 1922, 57 per cent of the farm houses were connected by wires with the outside world. Last year more than 121,000 rural subscribers were listed, as against 116,000 the preceding year.

Dairy improvement associations are likely to improve the bank account, too.



Chester Producers' Milk Cooler

All copper, everlasting. Built just like the big Chester Factory Milk Cooler, with seamless copper tubes and brass manifolds. Will stand 150 pounds pressure. Easy to clean. Cools within two degrees of water. Very reasonably priced. Made in four sizes.

Send for our new catalog

Get a copy of the new Chester Milk Producers' Catalog. It is yours for the asking. Keep it on hand for ready reference. It contains a fund of useful information. Send for it today—without obligation of course.

CHESTER DAIRY SUPPLY COMPANY
CHESTER, Dept. I PENNA.

EDITOR GETS IN BAD

An Oklahoma editor, just about to go to press "pied" a couple of articles, one concerning a public sale, and the other a write-up of a wedding. He asked the office devil to get the two articles together—and he did. Here is how he put the two together, and the mixture was not known to the editor until an angry preacher and the mother of the bride appeared on the scene:

"William Smith and Miss Lucy Anderson were disposed of at public auction at my barn one mile east of a beautiful cluster of roses on her breast, and two white calves before a background of farm implements too numerous to mention in the presence of about seventy guests including two milk cows, six mules and a bob sled. Rev. Johnson tied the nuptial knot with 200 feet of hay rope, and a bridal couple left on one John Deere gang plow for an extended trip with terms to suit purchasers. They will be at home to their friends with one good wheel barrow and a few kitchen utensils, after ten months from date of sale, to responsible parties and some 50 chickens."

In the three months' period January 1 to March 31, 1924, the agricultural forces active in replacing scrub sires with purebreds had 806 new recruits. This number of livestock owners, according to official records, signed agreements to use henceforth purebred sires exclusively for all classes of livestock owned. The number is an increase of more than 100 over that for the preceding quarterly period. The total number of livestock owners cooperating with the various States and with the department in the "Better Sires —Better Stock" campaign now exceeds 13,500.

DRAINING THE WET SPOTS

Drain tile is lower in price than it has been at any time since the war. The wet spring has given farmers an opportunity to locate wet spots on their farm. While expenditures for drainage on a large scale are not to be recommended it is an opportune time to eliminate the wet spots that break up the fields.

Gleanings From the Field

ORGANIZATION WORK IN NEW JERSEY

Membership work is now in progress in Cumberland and Salem counties, New Jersey. These sections are near the southern limits of the Philadelphia Milk Shed as it extends into New Jersey. Salem county is a true dairy section with moderately large herds of exceptional merits as producers and individuals. Cumberland county is more adapted to truck crops and yet near enough the dairying belt to the north that the average farmer feels he should keep a small herd. Most of the men in this section hold on to their cows particularly for the fertilizing value of the manure. Although the herds are small, the cows as individuals are far above the average.

The work in this section has been along the usual line of a campaign or drive centering around a more or less localized section. Preliminary letters were sent out to the individual dairymen who were to receive a call and these followed by a personal canvass.

The reaction to organization argument in this territory has been very favorable. Up to the present time about one hundred and fifty dairymen have joined the Association. The drive is nearing completion and will probably be finished about the last of June. Five stations have been worked and in each section the prospect is good for at least 75 per cent. membership.

It is interesting to see what particular service, which the Association renders, the producers attracts them to the organization. The value of our testing service was never more forcibly brought to the field workers' attention than in their work here. Many of the men joining were attracted to the organization through its ability to give them the advantage of a thorough and systematic checking service on their butterfat tests and weights.

It is very gratifying for Association workers to find a sentiment so thoroughly in favor of organization as that encountered in this section. Progressive dairying in any section that serves a large market must grow specialized. Specialization entails a careful attention to the demands and operation of the marketing machinery through which the producers' milk passes, before reaching the consumer. Thoughtful and business-like dairymen are coming more and more to see the necessity of knowing the markets as they know their cows. This attitude has been very evident in our work in South Jersey. The careful consideration with which our representatives were received made the work a very pleasant one and we wish to take this opportunity to express our gratification for their active co-operation.

COW TESTING ASSOCIATIONS

MONTGOMERY COUNTY ASSOCIATION

Carl L. Sager, Tester
R. G. Waltz, County Agent

The first month of the association year was that of May. Following is a report of the month: Herds tested, 25; cows in milk, 288; cows dry, 25; number of cows producing over 40 lbs. butterfat, 42; over 50 lbs. fat, 14; cows producing over 1,000 lbs. milk, 74; over 1,200 lbs. milk, 35.

The highest cow for milk and butter fat production in the association was a registered Holstein, Annie, owned by Alvin K. Rothenberger of Worcester, she having produced 2,657 lbs. of milk, 82.4 lbs. butterfat. This cow is 6 years old, was fresh in April and made that record in 2 milkings a day. The second highest cow was Aaggie, a registered Holstein 6 years old and also owned by Mr. Rothenberger, she having produced 2,326 lbs. of milk or 69.8 lbs. of butterfat.

Following are the ten highest producing cows in butterfat for the month:

Owner	Name of Cow	Breed of Cow	% Fat	Lbs. Butterfat
A. K. Rothenberger	Annie	R. H.	3.1	82.4
A. K. Rothenberger	Aaggie	R. H.	3.0	69.8
O. M. Woodward & Son	Honora	R. B. S.	4.6	64.4
Harvey Murphy	B. W. Cow	G. H.	3.6	63.6
A. A. Heebner	No. 11	G. H.	3.9	61.4
A. K. Rothenberger	Yng. Aaggie	R. H.	3.0	58.3
A. K. Rothenberger	Annie 3	R. H.	3.5	58.0
J. L. Wood	Tillie	R. H.	3.4	55.7
Warren Schultz	Red	G. S.	4.0	55.0
A. K. Rothenberger	Copia No. 2	R. H.	3.8	54.2

It should be observed that a registered Brown Swiss owned by O. M. Woodward & Son is one of the high producing cows for the month.

The following herds made the highest herd average for milk production:

Name	Cows	Lbs. Milk
A. K. Rothenberger	20	1234.5
J. L. Wood & Sons	14	1093.4
Owen Gerhardt	14	1016.6
Ursinus College	13	996.0

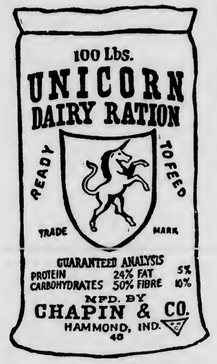
The following herds made the highest butterfat average:

Name	Cows	Lbs. Milk
A. K. Rothenberger	20	43.0
J. L. Wood & Sons	14	39.9
Owen Gerhart	14	36.1
Harvey Murphy	15	33.3

The following herds had the highest average test:

Name	Test %
J. L. Middleton	5.03
C. Wm. Haywood	4.89
O. M. Woodward & Son	4.29
Harry Wendell	4.61

Mr. Harry Miller is producing milk at a low feeding cost. He is feeding a good quality alfalfa hay together with a mixture of 400 lbs. of corn meal and 100 lbs. oil meal. His 14 cows made an average production of 710 lbs. of milk per cow.



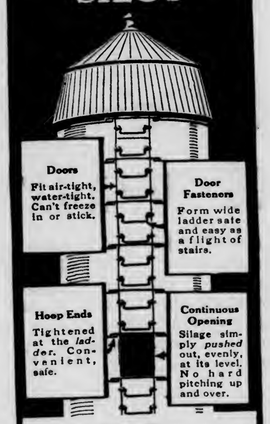
FOR sixteen (16) years dairymen have been feeding Unicorn with profitable results.

Some day, (soon we hope) you will join these dairymen who are producing milk at lowest cost by feeding

UNICORN

CHAPIN & COMPANY
CHICAGO, ILLINOIS

UNADILLA SILOS



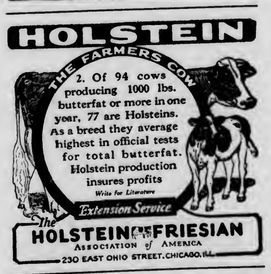
4 of the Reasons

why you'll find more Unadilla Silos sold today in the East than any two others. The Unadilla saves much of your time; is convenient, safe and easy to use; keeps silage good to the last forkful; is a tower of strength and a complete satisfaction to its owner.

Send for catalog fully describing all the Unadilla features and advantages. You can get your Unadilla on easy terms. Early orders earn a real saving in handsome discounts.

UNADILLA SILO COMPANY
Box D Unadilla, N. Y.

HOLSTEIN

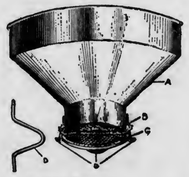


The HOLSTEIN-FRIESIAN ASSOCIATION of AMERICA
230 EAST OHIO STREET, CHICAGO, ILL.

E. NEWLIN BROWN
Live Stock Auctioneer
WYCOMBE, BUCKS CO., PA.
Sales Anywhere —Anytime

Clean milk brings top market price

To be clean, it must be kept free from sediment



A. Strainer Funnel.
B. Sterilized cotton through which milk MUST GO.
C. Coarse wire screen ring for clamping cotton pad to bottom of funnel.
D. Wire clamp.

Bossy gives good milk, then tries to spoil it with the dirt accumulation on her body. Proper straining restores the quality. Our Dr. Clark Purity Milk Strainer will remove every last bit of sediment from the milk—and no other strainer will. That is why more than ten million gallons of milk are strained daily through the Dr. Clark.

10-qt. and 18-qt. sizes. No cloths, no fine wire gauze. The Dr. Clark Purity Milk Strainer is inexpensive, lasts indefinitely, and assures absolutely clean milk at a cost of about a cent a day. If your dealer can't supply you, write

PURITY STAMPING CO.
Dept. F 243 Champion St.
Battle Creek, Mich

Willard

Storage Battery and Service Station

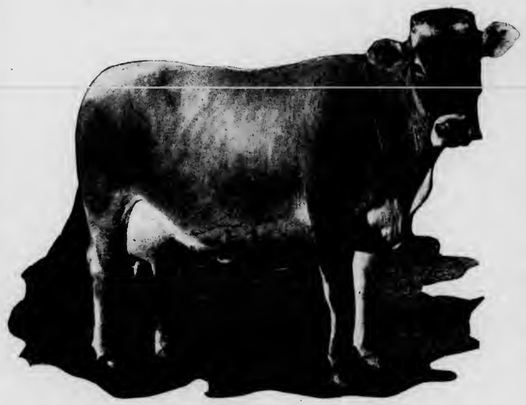
Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

Believe, world's champion Brown Swiss cow, and champion of all breeds for cows over 12 years of age.
Left—George Minette, under whose care the record was made.
Right—F. P. Minette, Sauk Center, Minn., owner.



14-Year Old Cow Makes World's Record Milked with a De Laval

Again a cow milked with a De Laval Milker makes a world's record—probably the most remarkable of the many great records made by De Laval-milked cows. This record was made by Believe, a purebred Brown Swiss cow owned by F. P. Minette & Son, Sauk Center, Minn., who at the age of 13 years, 6 months and 5 days, started a yearly test and completed it by producing 25,847.8 lbs. of milk containing 1002.62 lbs. of butter-fat. This record not only makes Believe the greatest producer of all Brown Swiss cows, but also makes her the champion producer of all breeds for cows over 12 years of age.

Believe was milked during the entire period with a De Laval Milker, and George Minette, under whose care the record was made, says:

"We have been using a De Laval Milker for over two years, and it has given very good satisfaction. We have used it every day and have just finished several wonderful records, especially the one made by Believe. No doubt Believe, being a wonderful cow, would have made a good showing anyway. However it is only right that we give the De Laval Milker its credit."

There is no question but that a De Laval Milker, because of its uniform, gentle and stimulating action, helps cows produce more milk, as records such as this are constantly proving. You may not be interested in making big records, but you certainly want to produce more milk, of better quality, at less expense—and this a De Laval Milker will surely help you do. If you are milking ten or more cows by hand, you can soon pay for a De Laval. It is sold on such easy terms that you can use it while it is paying for itself.

The De Laval Separator Company

NEW YORK 165 Broadway — CHICAGO 29 E. Madison Street — SAN FRANCISCO 61 Beale Street

Sooner or later you will use a De Laval Milker and Cream Separator

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PROD

VOLUME V — WEST CHESTER, PA., AND PHILADELPHIA, PA., AUGUST, 1924 — NUMBER 4

THE MILK MARKET—CONSUMPTION ON LOWER BASIS

Little Change in Production

Conditions during the past few months have been favorable for milk production. There has been an exceptional growth of roughage during the spring and early summer months. Pasture has been exceptionally good and a continued heavy milk flow has resulted.

On the other hand consumption in the large metropolitan districts has not increased. The vacation season results in a decreased consumption and in addition there has been a material decrease in the buying power of some of the cities due to unsatisfactory business conditions. There is a large increase in unemployed labor. Large industrial plants have slowed down materially and there have been some decreases in wages.

These conditions all contribute to our unsettled condition in the milk markets. It means going ahead slowly.

In most cases the price of fluid milk in the Philadelphia Milk Shed remains practically unchanged. There has been no change in the basic prices of milk for fluid consumption. Condensing plants have on the other hand been compelled to shade prices in order to meet the market for such products from competition from districts where lower prices are paid for milk.

It is hoped that the customary shortening in supply may develop during the early fall months. This may be necessary in order that the present price basis be maintained.

In view of the prevailing higher prices for wheat and corn, milk producers are confronted with higher costs of production during the fall months. Both of these grains have been on an upward turn during the past month.

Market conditions generally should be carefully observed by all milk producers before planning for their basic quantities this fall.

Much will depend on crop and market conditions during the next two months.

Economical production will be a factor in the profit obtained from milk production. Fewer cows of greater milk production will return more money than larger herds of unprofitable individual cows.

Cow population and production has increased very largely in the middle west, where milk can be produced cheaply. This may have a bearing on the general economic situation.

While these conditions may not directly effect the fluid milk supply in this market, it does have a bearing on the butter market, which directly effects the price of fluid milk.

Butter prices have shown considerable fluctuation during the past few months. New York 92 score solid packed butter during May averaged 38.5, an upward turn followed in June with average prices at 41.3 cents, with market ranges from 40 to 42.5 cents. July found the market sagging, with an average price for butter at 40.5 cents. The month's range was from 38½ to 42 cents, with a gradual decline almost throughout the month. Holdings of butter at the four large holding cities, New York, Chicago, Boston and Philadelphia on July 19th show a large gain with 57,975,838 pounds

(Continued on page 3)

SANITARY INSPECTIONS ARE MAKING RAPID FORWARD MOVEMENT

Every Dairy to Be Covered

Over six thousand dairy farms have been inspected by the field forces of the Quality Control Department of the Dairy Council in connection with the new Sanitary Regulations of the Inter-State Milk Producers Association.

Temporary permits were necessary on the part of co-operating producers and distributors, on May 31, 1924. Those issued aggregated nearly 16,000.

Since that time the inspection forces of the Philadelphia Inter-State Dairy Council have been actively engaged in field inspection work, some 6000 farms and dealers plants having been inspected. This work has been done largely in New Jersey, Delaware and Maryland, as well as several counties in Pennsylvania.

Inspection work is now under way in Chester county, Pennsylvania.

Re-inspection work is being carried out in New Jersey at the present time.

These re-inspections are largely necessary in nearly every district, in that at the preliminary inspections, producers and distributors were given adequate time to "clean up" before final inspections were made and permanent permits granted.

Approximately 100 dairies have been discontinued by co-operating distributors by reason of their failure to meet the provisions of the Sanitary Regulations.

There is considerable variation in some of the various districts of the Philadelphia Milk Shed as to the spirit shown by the milk producers in meeting the regulations.

In most sections, particularly on the Eastern Shore of Maryland, and in some parts of Pennsylvania, producers have made every effort to meet the provisions of the regulations, even though the backward season has interferred to a certain extent, with the progress of the work. In such cases these producers have asked for a little more time to complete the work, although almost every one has made such changes and improvements, as rapidly as possible.

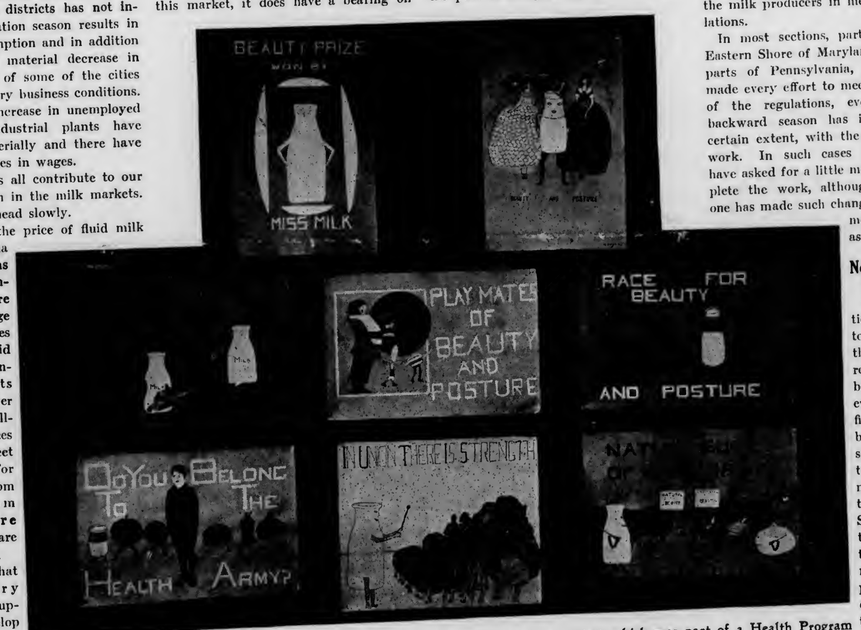
No Let Up in Inspection Work

In some few sections, there seems to be a feeling that the sanitary regulations will not be enforced. That even though the first inspection has been made, that subsequent inspections will not be made, at least in the near future. Some farmers have taken advantage of this feeling to delay making any improvements whatever, hoping that the regulations will not be enforced. This situation is particularly true in some sections of New Jersey.

Re-inspections, however, are being made in New Jersey at this time and it is expected that a number of producers will be placed in a position where they may be liable to lose their present milk markets. It is not expected, however, that producers who fail to meet the requirements will be permanently laid off by co-operating dealers, but rather, that they will be suspended until such time as they have complied with the qualifications of the regulations.

The field forces of the Dairy Council are making farm inspections as rapidly as possible, every farm shipping milk to a co-operating dealer will be inspected.

(Continued on page 7)



Winning School Posters in Haverford Township, Pennsylvania, Schools, in a contest which was part of a Health Program in which the Dairy Council co-operated.

MILK PRODUCERS AND ORGANIZATION

Reprinted from the "GARDEN SPOT NEWS", Lancaster, Pa.

During the latter part of June there were two sporadic efforts on the part of the milk producers of Lancaster County to better their milk marketing conditions. While we know that the producers of both the Mt. Joy and the Quarryville sections mean business insofar as their individual communities are concerned, we keenly feel that these sectional movements cannot have the proper effect nor the desired momentum unless there is the same interest in all parts of the county.

We feel quite certain that the milk marketing system of the county will not be placed upon a fair and business-like basis unless some men or some organization be definitely charged with the responsibility of inducing a majority of the milk producers in the county to affiliate with a workable milk marketing organization.

Producers selling milk from unorganized territory will have little need to go into other counties or into other states to have the merit of a milk marketing organization demonstrated to them. About half of this county has been selling its milk through the Interstate Milk Producers' Association for the past few years, and this organization has undoubtedly justified its existence by the services that it has rendered its membership. The prices paid in the section of Lancaster County which is selling through the Inter-State have averaged higher than in any other part of the county; its members have been reconciled to the production of cleaner milk; the organization's bargaining system of selling has proven more satisfactory than where marketing associations have undertaken to market directly or to manufacture the milk product; the Inter-State has always adjusted differences in weights, tests, time of delivery to receiving stations, etc.; its "basic milk" plan has created an even flow of milk throughout the year and has kept the prices paid to the producers uniformly high. The Association has even gone one step further in the marketing of a staple product in that they have advertised the value of milk to consumers, just as the American Tobacco Company advertises their cigarettes or the California Fruit Growers broadcast the delicious qualities of their oranges. As a result, they have increased the amount of milk consumed in the Philadelphia territory, a fact which again stabilizes prices.

By the individual plan of selling there is only one man who makes the bargain, one man who dictates what the price is to be, one man who names the time or the periods when producers shall be paid, one man who determines what the test is and from whose decision there is no redress, one man who determines what the price of trucking shall be, one man who states at what time your milk shall be moved from your platform, whether it arrives at the receiving station in condition with pay, or "sour-return." The travesty of it all is that the other man does all of this with the product which you call your own. It seems that in the milk business custom plays a wonderfully important role, even on the spirit of '76.

There are several crops in this county that will easily lend themselves to organized marketing and the milk crop is one of the most important of these. When the Inter-State system of marketing has been so fully demonstrated right at our own doors, it seems difficult to understand why all of our communities do not get together on a similar plan of marketing rather than to be continually arguing and quibbling about their own milk marketing differences and wrongs (a method which starts everywhere and ends nowhere).

While organization will not prove an absolute cure for every petty wrong, whether real or fancied, it will insure having two parties to the marketing contract instead of one. The reason that many refrain from joining in such an agreement is, first, that it is not fully understood, second, that producers think that they are binding themselves to an agreement in which they anticipate they are making sacrifices and, lastly, that the returns on the small expense apparently do not have the "gold brick" halo for them. Any thoughtful producer, however, must appreciate the fact that such an organization places his product on the market in the most business-like manner, and cannot but feel that if he is to realize the most from his product he has but one alternative.

FARMERS CAN IMPROVE WHEAT BY PROPER HANDLING

In the harvesting and handling of the 1924 wheat crop, farmers can do much to improve the quality, grade, and price of their grain, according to Departments of Agriculture. In previous years the important causes of reduced grades and prices have been Angoumois grain moth, high moisture content, and the presence of foreign material such as garlic and cockle.

In a season of heavy rainfall, much can be done to prevent high moisture content by good shocking in the field. Solidly made shocks of good size, properly capped with bundles of grain so as to prevent rain entering the center of the shock, will reduce the moisture content of the grain. When bundles of grain are blown over or lie upon the ground, both the appearance and actual value of the grain for milling purposes is directly injured.

The grain should be threshed just as soon as possible after harvesting. In this way damage from the Angoumois moth can be reduced or prevented. Grain threshed or shipped before August tenth in previous years has shown very little damage from Angoumois grain moth when it arrived at market. Unless the farmer threshes and sells his wheat before the first part of August, he should make arrangements to fumigate it thoroughly with carbon bisulphide as soon as threshed. If the first fumigation is repeated again about ten days later, the chance for the moth to develop will be reduced considerably. Directions for fumigating can be secured from any County Agent or the Departments of Agriculture. and should be followed closely to make the treatment effective. Unless the wheat is carefully fumigated, it should be marketed as soon as possible after threshing.

Garlic has been a problem in wheat for years and will continue to be until farmers eliminate it from their fields by crop rotation, thorough cultivation of land before seeding and planting clean seed. Contrary to the popular opinion, the disagreeable odor is not the chief cause for the discounts prevailing on garlicky wheat. The effect of garlic is rather on the operation of the break rolls of the mill, as the juicy garlic has a tendency to collect on the rolls and so reduce the efficiency of milling to such an extent that it is necessary to stop the mill in order to clean the rolls. This reduces the capacity of the mill and considerable discounts will prevail as long as there is a surplus on the market. When garlic dries out, it becomes lighter than wheat and can be blown out with the ordinary mill cleaning machinery.

Owing to the wet weather this season, cockle and other weeds have been more abundant and conspicuous than usual in wheat fields. The removal of cockle makes the use of special cleaning machinery necessary, as it must be removed before a satisfactory flour can be milled. The presence of more than 1% cockle in flour seriously reduces the loaf volume of the bread and the value of the flour.

Perhaps the most important single thing that farmers can do to help in the marketing of their wheat is to demand the right to sell by grade, either to miller or shipper, and to be paid a premium for wheat above the average in quality. In many counties dealers are planning to purchase by grade and they should receive the full support of the producers. One load of poor wheat placed in a car of good wheat reduces the value of every bushel in the car.

Inferior wheat shoud be kept separate at a time from the higher grades of the hard dark vitreous wheat of the standard varieties. Both hard and soft textures of wheat have more value when kept separate than when mixed together in one lot as separation is impossible after mixing has taken place.

SWAT THE FLY

Flies are one of the worst enemies of man. They breed prolifically and prosper in filth. Their conformation is admirably suited for carrying death-dealing organisms from questionable places which they frequent, to the dwelling places, food utensils, and food of man. Flies are a nuisance and anyone who fights them is doing humanity a service.

The female fly is not fastidious about the place in which her offspring are to be born. A manure pile represents the height of her ambition in this respect, and when she has the opportunity she deposits her eggs there in masses. The manure pile reciprocates by acting as an incubator for her young, and in a few days the maggots which hatch from her eggs have developed into full-fledged flies, all ready to start on a campaign of destruction and perhaps death.

The fly is covered with a hairy growth and its feet resemble hairy pads. It probably carries as much filth and as many bacteria on its body, for its size, as anything which lives. No wonder then, considering this point alone, that the fly is an enemy of milk. But this is not all, for the fly is a creature of filthy practices. It sucks its food without fear or favor and then regurgitates it at will. A smooth-surfaced milk utensil may be a handy place for this procedure.

The fly scatters its excreta promiscuously. Its specks may be found on any place it frequents. They look unsightly, but are even worse than they look, because they often contain organisms which are decidedly detrimental to health. Is it any wonder that we are besought and urged to "swat the fly"?

No one is more alive to the danger from flies than the milk inspector. His training and his ambition both call for the destruction of this enemy of clean, safe milk. But sometimes he forgets that not all of the producers are familiar with the characteristics and habits of the fly. He thus overlooks an opportunity. He should explain to his dairyman and also to the people who consume the milk why there should be adequate protection from flies. When a full explanation is made to the dairymen about the fly and its habits, he becomes interested in getting rid of manure piles, trash and other breeding places, and in trapping and poisoning the flies which appear.

The inspector who studies the fly menace and teaches control methods to those concerned, may justly feel that his time is well spent.

(Milk Inspectors Letter No. 84)

STATE DEPARTMENT GETS MANY REQUESTS TO TEST CATTLE

Nearly half a million head of cattle have been tested for tuberculosis by the Bureau of Animal Industry, Pennsylvania Department of Agriculture, since the service was started, twenty-seven years ago. During the first five months of 1924, the tuberculin tests have been applied to 97,000 cows in 11,776 different herds.

This information is contained in a report to Secretary Frank P. Willits. It as also announced that the progress made in recent years indicated a widespread interest among Pennsylvania farmers in accredited herd testing. Their requests for examination of cattle have increased enormously, so that about 15,000 herds are now awaiting initial tests.

Officials of the Bureau say they are pushing the tests as well as they can under the limited appropriation available, and future expansion of the work depends upon funds provided by the legislature. It is expected the Department will be called upon to apply the tuberculin tests to approxmately 600,000 cattle during the next two years.

ELECTRIC LIGHT AND LIGHT FROM SUN SAME TO PLANTS

The discovery that the seasonal blossoming and fruiting of plants is caused by the length of day, made a few years ago by investigators in the United States Department of Agriculture, has been completely confirmed by experiments with artificial light and colored light. Previous to these investigations, which were carried on by W. W. Garner, H. A. Allard, and R. A. Steinberg, of the Bureau of Plant Industry, normal plants never had been fully developed under artificial light, but it has been shown that under such conditions plants can be grown normally and will produce normal seed.

Artificial control of all the conditions necessary to the normal development of the plants from germination to maturing of the seed has been secured by specially designed appartus to which no daylight can enter. The light rays from a gas-filled tungsten lamp are filtered through a layer of running water which carries away most of the heat while interfering very little with the passage of the light. By means of colored glass or colored chemicals in the water, sunlight can be simulated or light of widely different colors or spectral composition can be obtained, as well as lights of intensities equal to or greater than that of sunlight. The day length is regulated by electric time switches which turn the lights on and off at the desired time. Inside this apparatus daily and seasonal changes may be made to go on at complete variance to the days and seasons going on outside.

Among the more than 60 species of plants which have been grown under these conditions are lettuce, celery, spinach, morning glory, rudbeckia, godetia, cypress vine, soybean, bidens, chenopodium and poinsettia.

With all these plants the response to the length of day has been the same as in sunlight The "short day" plants, the characteristic autumn and winter blossoming plants, blossom when exposed to the short artificial day. The summer blooming plants blossom when given a long day under electric lights.

Practical conditions, say the investigators, preclude the use of artificial light in place of daylight, but it will be possible in growing some greenhouse plants to extend the natural day by use of electric lights to speed up blooming. Obviously this practice will be useful in case of 'long day'" and "indeterminate day" plants. A relatively low-power illumination can be used, extending the length of day from 16 to 18 hours for many plants. Intense lights have been found unnecessary and wasteful. It is said that for commercial use engineers and greenhouse men must work out the particular requirements of special crops.

Experiments have shown the fallacy of a rather widely accepted view of plant physiologists, particularly those in Europe, that certain wave lengths of visible light are essential to normal development of green plants. Healthy normal seed has been produced with wide variations in composition of the light used.

Uncle Ab says that co-operation means sharing the downs as well as the ups, and that there are always some downs.

Plenty of silage and good legume hay **Help us to keep high feed bills away.**

JAPANESE BEETLE PARASITES ATTACK DESTRUCTIVE PESTS

Parasites imported from Japan to combat the destructive beetle from the same country are living up to their reputation. They are attacking the beetles so satisfactorily that the experts of the Federal and State departments of agriculture are greatly encouraged in their fight against the pests.

Parasites released some time ago in New Jersey have established themselves and their egg masses are on the beetles. The infested beetles have been collected in large numbers and sent over to the Pennsylvania area in an effort to establish this species of parasite in this State as soon as possible, according to a report issued by Dr. C. H. Hadley, director of the Bureau of Plant Industry, Pennsylvania Department of Agriculture.

In his statement on the present status of the beetle situation, Dr. Hadley said:

"The Japanese beetle has emerged from the ground this season later than in previous years by from two to three weeks. They first appeared this season in the vicinty of Torresdale. At the present time beetles are emerging in large numbers throughout the heavily and generally infested areas in both Pennsylvania and New Jersey.

"Contrary to the opinion of some people, the wet spring weather has not materially reduced the number of beetles, but has merely delayed their coming. Indications are that the beetles will probably be more numerous this season than last season, following the usual course of events wherein it is expected that there will be a numerical increase in beetles each succeeding season.

"So far this season two shipments of parasites from Japan and Korea have been received at Riverton, N. J., the headquarters of the Federal field workers. Included were several types of parasites, for experimental purposes. Of the parasites received in earlier seasons, at least one species liberated has appeared in the area in considerable numbers. The Japanese beetles which have been attacked by this particular species of parasite have been collected in large numbers from the Riverton district and have been sent to the heavily infested portions of the Pennsylvania area of the Pennsylvania district in an effort to establish this species in Pennsylvania in the shortest possible time.

"Experiments with this particular parasite so far have shown that it undoubtedly will be very valuable and the success obtained with it goes a long way to prove that the plan of parasite work which has been followed is probably the best plan under the circumstances, and has greatly encouraged the authorities. Every effort is being made to push the parasite work as rapidly and as extensively as conditions will warrant."

THE MILK MARKET

(Continued from page 1)

as compared to 46,486.084 pounds, one year ago.

Surplus milk, that is milk received by co-operating dealers in the Philadelphia Milk Shed, has been in about much the same volume as last year, but with decreasing consumption on the part of consumers represents a larger share of the total volumne of milk received. In some outside territories, surplus milk has been a material factor in fixing current prices.

The various conditions effecting the market for milk, cream and ice cream are not confined to this district alone, but reflect largely the general conditions throughout the world's production and supply.

Milk producers should continue to study conditions carefully before changing or increasing their production plans during the coming fall months. Much depends on the demand. Business conditions will be a factor in the buying capacity of the consumer and during a presidential year there is a strong disposition to make haste slowly. Milk production should be governed by these conditions, to a considerable degree. Make haste slowly.

RURAL ELECTRIC SERVICE

Hearing Before Public Service Commission

The meeting room of the Public Service Commission at Harrisburg, Pa., on July 9th was over-crowded with more than 250 representative farmers and public utility officials at the first hearing of the Commission to consider lower rates and better facilities for electric service on the farms and smaller communities throughout the State were present. The afternoon session was held in the State House of Representatives room in the Capital.

This hearing was the opening session of the Commission and was held under the direction of Commissioner Fred J. Miller, with whom sat Commissioner John L. Stewart and representatives of the State Attorney General's office and of the Giant Power Survey.

The Electric Service Committee of the Pennsylvania State Council of Agricultural Association, upon whom the burden of the plea for better rates and service fell, was represented by Harold Evans, Esq., of Philadelphia. Mr. Evans briefly outlined the requests of the agriculturists as well as the inhabitants of the smaller communities in the Commonwealth for the installation of service and for better and more reasonable facilities.

Ralph Baker, Esq., representing the public utilities, expressed the desire of the utilities to co-operate in this work and outlined for the Commissioner, just along which lines this co-operation might be accomplished.

Following these addresses Commissioner Miller decided to hear, from those present, brief conditions as such witnesses had to offer.

Testimony was given by M. T. Phillips, Pomeroy, Pa.; H. D. Allebach, Trappe, Pa.; A. H. Brenneman, Pittsburgh, Pa.; W. P. Rodgers, Monongahela, Pa.; Robt. M. Carrons, Washington, Pa.; Fred C. Brenkman, Harrisburg, Pa., and several others.

These witnesses briefly testified as to the farmers' position and their desire for service at a reasonable rate and cost of construction and installation.

A large share of the afternoon session was given to a hearing on the part of representatives of the utility organizations.

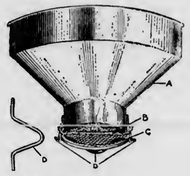
Many of these questions, asked by Commissioner Miller had the details of operation and cost and in many cases were quite technical.

At the close of the session the Commissioner announced that further hearings would be held of which timely notice would be given.

Better cows together with liberal feeding and good care make the dairy profitable; every dairyman should be his own efficiency expert, watching all the details of his business.

Pure milk is *clean* milk

Remove the dirt — and you remove the bacteria



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B. Sterilized cotton through which milk MUST GO.
C. Coarse wire screen ring for clamping cotton pad to bottom of funnel.
D. Wire clamp.

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Try this test: strain milk through as many cloths and wire gauze strainers as you wish. Then strain it through the Dr. Clark, and note the dirt it takes out which the others leave in. Made in 10-qt. and 18-qt. sizes, inexpensive, and lasts a lifetime. If your dealer can't suppy you, write

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INTERSTATE MILK PRODUCERS REVIEW

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Editorial

That there is grave danger in view of the continued depression of general business and threatened lack of employment among the laboring classes, particularly in the large industrial cities, is eminent. Should this depression take place the dairy industry will feel its force before the end of the year. Consumption is already showing a decrease.

Two conditions confront the milk producer. Should milk production, during the remainder of the year, reach the proportion that it did in 1923, there would be no doubt but that it would be in excess of the demand. This milk would therefore have to go in other lower price channels of production and there would be grave necessity for price reductions in order to stimulate consumption.

Any increase in production during the second half of the year, would be at the expense of prices.

Even during the fall of 1923, production reached a point which exceeded the current demand. In many cases the basic quantities of milk produced were larger than ever before and it has been pointed out that the same relative increase this year can not do other than break the market.

The movement toward greater facilities and lower rates for electric service on the farms and smaller communities in the Commonwealth of Pennsylvania is under way. The Public Service Commission has had its initial hearing on the question. It is interested. It asks the utility organizations the why's and wherefore's. It asks the farmers to give their needs and requirements.

It is necessary that every farmer--every farm organizaiton—get strongly behind this movement, both morally and **financially.**

The Rural Electric Service Committee of the Pennsylvania State Council of Agricultural Organizations, which represents that organization in the effort for better service and rates, has its work cut out for it and will need the fullest support.

Utility organizations have expressed their willingness to co-operate in this movement but it is absolutely necessary that the farmers look after their interests in their own way.

FARM WAGES AND LABOR IN NEW JERSEY

The New Jersey Crop Reports, as of July 1st, 1924, recently available shows the average wages being paid for farm help at the present time are estimated as follows. Per month with board, $48.00; per month without board, $72.00; by the day with board, $2.70; by the day without board, $3.65. These figures show a very slight increase over the April first estimates.

The present supply of farm labor is estimated at 84 per cent of a normal and the demand at 90 per cent of a normal, resulting in a potential farm labor supply of 92.3 per cent of normal, as compared with 84.4 per cent on April first and 90 per cent on March first.

FOOD BUREAU ROUND-UP VIOLATORS OF MILK LAW

During June, 143 violators of the State's milk and cream act were prosecuted by the Bureau of Foods and Chemistry of the Pennsylvania Department of Agriculture. The majority of the cases involved milk that was so low in butterfat that it did not measure-up to the requirements of the law. In ten instances cream was found deficient in butterfat, and fourteen dealers were taken to court for selling skimmed milk as whole milk.

There were 53 other prosecutions, 36 of which were brought for violations of the general food act. The Bureau rounded-up a number of grocers who sold dried fruits containing chemical preservatives.

Receipts from fines and licenses during the month amounted to $4,581.78, bringing the Bureau's income for the first six months of the year close to $403,000, which exceeded the total for the same period last year by about $8,000. Food fines netted $2,280; oleomargarine licenses, $992; meat fines, $400; butter fines, $200, and milk fines the same amount.

TWO MORE PENNSYLVANIA JERSEYS QUALIFY FOR SILVER MEDALS

Two more names were recently added to Pennsylvania's long list of Silver Medal Jerseys when two young Jerseys completed Register of Merit test. The two medal winners are Penstates Pogis Hattie 475607 and Idelpha's Princess 514417.

Penstates Pogis Hattie is owned by the Pennslyvania State College. In 365 days she produced 614.79 pounds of butter-fat and 10,611 pounds of milk, starting test at three years of age. Calving requirements were also complied with.

Idelpha's Princess produced 411.75 pounds of butter-fat in 305 days and dropped a living calf within fourteen months of previous freshening. She started test at one year and eleven months of age. Helen Baker of Grove City, Pennsylvania, is the owner of this **promising youngster.**

DR. C. W. LARSON

DR. LARSON APPOINTED CHIEF OF DAIRY BUREAU

Secretary of Agriculture, Henry C. Wallace has announced his appointment of Dr. C. W. Larson, to be Chief of the Bureau of Dairying, the United States Department of Agriculture.

Congress recently enacted a law which raised the Dairy Division to a Bureau of Dairying. Mr. Larson has filled the former position since 1921 and has gained the confidence and support of the dairymen of the country.

Dr. Larson was born on a farm in Iowa. He graduated from the Animal Husbandry Department of the Iowa State College in 1906.

In 1907 he was appointed instructor in dairying at Pennsylvania State College, assistant professor in 1909-1913 and professor in charge of the department of Dairy Husbandry from 1913 to 1916.

While at Penna State College he had charge of a creamery of considerable size, where various dairy products were made, and also greatly enlarged the herd as well as buildings and equipment for studies in milk production..

He received the degree of Master of Science from Pennsylvania State College in 1913. In 1916, while on leave he took studies in economics and commerce, and received a degree of Doctor of Philosophy from Columbia University.

He was appointed assistant professor of Agriculture and Agricultural Economics which position he held until 1917, when released to take up special work in the Dairy Division, Bureau of Animal Agriculture. He was appointed assistant Chief in 1919 and Chief in 1921.

ONLY HIGH GRADE MILK NOW SOLD IN THIS STATE

Chemical preservaties have been driven from the State's milk supply, and its citizens are now served with purer and better milk than at any time during the last score of years. Director James Foust, of the Bureau of Foods and Chemistry, Pennsylvania Department of Agriculture, says the doped milk has been wiped out as a result of the twenty years' campaign waged against it by the Bureau's field agents, and other health officers.

More than 1,800 samples of milk and cream have been purchased in all parts of the State since January 1. All of them have been tested and analyzed by the Department's chemists So far no cases have been brought against milk dealers for violating the law prohibiting the use of chemicals to preserve milk. During 1923 chemists found no indication of dope in any sample collected by **agents throughout the State.**

NATIONAL DAIRY CATTLEMEN'S CONFERENCE

A National Dairy Cattlemen's Conference will be one of the new things for dairy farmers at the National Dairy Exposition to be held at Milwaukee, Wisconsin, September 27th, to October 4th. This conference will commence at 10 o'clock on the morning of October 1st in the Woman's Building on the Exposition Grounds. Every farmer and buyer of dairy cattle in the country may sit in at the first conference although delegates will be sent by many states.

The big work of the Conference will be to work out rules and regulations to govern sales of dairy cattle and to formulate an organization to safeguard the interest of buyer and seller on the highest line of business integrity. It is hoped also to develop an understanding on sanitary requirements of the states for admission of cattle from other states and an effort will be made to bring uniform sanitary laws. Men of national prominence in animal industry affairs and leading marketing authorities and heads of farm organizations will take part in the deliberations and formation of an organization to carry on the results of the Conference and put them into operation.

This is one of the most constructive of many features of interest to farmers and breeders that has been undertaken by the industry and should be a most interesting conference. With the extraordinary growth of dairying in many new states it is essential that every safeguard be thrown around the exchange of dairy cattle between states.

HOLSTEIN CALF CLUB ROUND-UP

The Calf Club was started last August when nine boys of Upper Hanover Township, Montgomery County, Pennsylvania, purchased a purebred Holstein heifer calf each. Since then the feeding and management has been carried on entirely by the boys and many of them have been feeding their calves according to recommendation sent out by the Farm Bureau. James L Wood, a Holstein Breeder, was interested in getting the club started and has been the local leader.

The calves were assembled on the field of the James L. Wood farm near Red Hill. They were well groomed and put in a show condition by the individual members of the club. S. J. Brownell placed the animals according to individual type and conformation. A. S. Barnhart, assistant club Leader at State College, made the scores on records kept.

The placings were as follows: (1) Homer Beiler, (2) John Pfrommer, (3) Oren Woodward, (4) Luther Pfrommer, (5) Clifford Wood, (6) Harry Wood, (7) Donald Wood, (8) George Wise.

The Quaker Oats Company of Philadelphia represented by W. A. Frazier, presented a silver loving cup to the winner who is to have the cup for one year.

The Holstein Friesian Association of America gave ribbons to the first four winners.

Approximately sixty persons were present at the field meeting.

The average value of farm land in Pennsylvania this year is placed at $73.50 per acre, including buildings.

Lancaster County lead the State of Pennsylvania last year in the number of dairy cows, having 42,349 within her borders. Bradford County was second with 39,000, and Chester County third **with 38,200.**

LATEST MARKET PRICES

Philadelphia Selling Plan

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1924. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1923.

Beginning with January milk will be paid for on the basic and surplus plan. Milk shipped in excess of the basic quantity will be paid for on the average New York 92 score butter price for the month, plus 20 per cent.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

JULY BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

JULY BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	238
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

JULY SURPLUS PRICE
F. O. B. Philadelphia

Test Per cent.	per 100 lb.	per qt.
3.	$2.09	4.5
3.05	2.11	4.5
3.1	2.13	4.55
3.15	2.15	4.6
3.2	2.17	4.65
3.25	2.19	4.7
3.3	2.21	4.75
3.35	2.23	4.8
3.4	2.25	4.8
3.45	2.27	4.85
3.5	2.29	4.9
3.55	2.31	4.95
3.6	2.33	5.
3.65	2.35	5.05
3.7	2.37	5.05
3.75	2.39	5.1
3.8	2.41	5.15
3.85	2.43	5.2
3.9	2.45	5.25
3.95	2.47	5.3
4.	2.49	5.35
4.05	2.51	5.4
4.1	2.53	5.4
4.15	2.55	5.45
4.2	2.57	5.5
4.25	2.59	5.55
4.3	2.61	5.6
4.35	2.63	5.65
4.4	2.65	5.7
4.45	2.67	5.7
4.5	2.69	5.75
4.55	2.71	5.8
4.6	2.73	5.85
4.65	2.75	5.9
4.7	2.77	5.95
4.75	2.79	6.
4.8	2.81	6.
4.85	2.83	6.05
4.9	2.85	6.1
4.95	2.87	6.15
5.	2.89	6.2

JULY SURPLUS PRICE
Country Receiving Stations

Test	per 100 lbs.	Test	per 100 lbs.
3.	$1.51	4.	$1.97
3.05	1.53	4.05	1.93
3.1	1.55	4.1	1.95
3.15	1.57	4.15	1.97
3.2	1.59	4.2	1.99
3.25	1.61	4.25	2.01
3.3	1.63	4.3	2.03
3.35	1.65	4.35	2.05
3.4	1.67	4.4	2.07
3.45	1.69	4.45	2.09
3.5	1.71	4.5	2.11
3.55	1.73	4.55	2.13
3.6	1.75	4.6	2.15
3.65	1.77	4.65	2.17
3.7	1.79	4.7	2.19
3.75	1.81	4.75	2.21
3.8	1.83	4.8	2.23
3.85	1.85	4.85	2.25
3.9	1.87	4.9	2.27
3.95	1.89	4.95	2.29
		5.	2.31

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.8	2.37
March	6.8	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations
1924

	Average per month Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51
June	1.95	1.62
July	**1.91**	

AUGUST PRICES
F. O. B. PHILADELPHIA
Country Stations

The same prices for basic milk as quoted above under July apply in August, subject however, to change whenever warranted by market conditions.

SECOND SURPLUS MILK

Under the regulations of the Philadelphia Selling Plan, there will be no second surplus milk quotations in July, August and September. Under the provisions of the plan fluid milk in excess of the basic quantity, during these months will be paid for as class one surplus, based upon the average price of New York 92 score butter, plus 20%.

JULY BUTTER PRICES
92 Score Solid Packed

	Phila.	New York	Chicago
1	41	40 3/4	38 1/2
2	42	41 1/2	39
3	42	41 1/2	39
5	..	42	..
7	..	42	..
8	42	41 1/2	39 1/2
9	41 1/2	41	39
10	41 1/2	40 1/2	39
11	41 1/2	40 3/4	38 3/4
12	41 1/2	40 3/4	38 3/4
14	41 1/2	41 1/2	38 3/4
15	41 1/2	40 3/4	38 1/2
16	41 1/2	40 3/4	38 1/2
17	41 1/2	40 3/4	38 1/2
18	41 1/2	40 3/4	38
19	41 1/2	40 1/2	38
21	40 1/2	39 1/2	37
22	39 1/2	38 1/2	36 1/2
23	39 1/2	39	37 1/2
24	40	39	37 1/2
25	39 1/2	38 1/2	36 1/2
26	39	38 1/4	36
28	38 1/2	37 1/2	36
29	39 1/2	38 1/2	36 1/2
30	39	38 1/2	36 1/2
31	39	38	36 1/2

Farmers now are just at the beginning of the time when electricity is to become the servant of agriculture.

The Bestov Calendar

Equipment to handle milk — **from cow to consumer**

KEEP THE MILK STANDARD

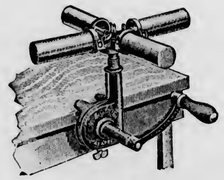
Run no risk of rejections because of low cream contents. Make sure; it is easy.

Let some cream rise in one of these faucet cans and then draw off the skim. Add the remaining pure cream to your shipment of milk. Your milk will then never be found below standard, but will often be above.

MILK TESTER

A farm milk tester for those who want to test by the Babcock cream test. Full directions with each outfit explain how you can determine the precentage of cream in your milk.

Price $6.50
(for 2 bottle size)



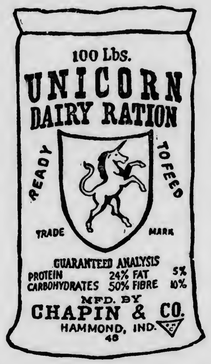
CREAM SETTING CAN

Made of heavy tinplate with cover and handle faucet and glass gauge.
Holds 20 quarts.

$3.00 Each

Cherry-Bassett-Winner Company

1918 Market St., PHILADELPHIA — 33 So. Charles St., BALTIMORE



IN every county from Wisconsin to Maine, there are dairymen who know how to get lowest-cost milk-production.

They do it by feeding

UNICORN

CHAPIN & COMPANY
CHICAGO, ILLINOIS

CONSIGNMENT SALE
—OF—
36
Registered Holsteins
—AT—
Huntingdon Fair Grounds
Huntingdon, Pa.
THURSDAY, AUG. 28th
Third day of Huntingdon County Fair, Aug. 26, 27, 28, 29, 1924

Cattle are all consigned from leading herds in Bradford County, Penna. All cattle are from herds under State and Federal supervision for tuberculosis eradication. Chiefly young cows fresh or soon to freshen. Secure catalogue from Paul D. Zebtmyer, Laird Building, Huntingdon, Penna.

IT PAYS TO STICK TO YOUR COOPERATIVE ORGANIZATION

Nothing proves more clearly the value of cooperative buying than the saving of 5 to 6 dollars per ton we saved on Dairy and Poultry Feeds. Compare the maximum pool price of feed with present market prices and see for yourself the amount of the saving.

Many Dairymen, buying feed in the Pool, made the mistake of ordering only PART of their winter requirements, expecting to purchase the balance later at the market price.

Don't Make Another Mistake

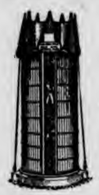
While the market price is considerably higher already, than the pool price, it may go still higher. Look your corn field over and size up the feed markets, and we believe you will make no mistake to order more feed now.

Remember the Feed in the Pool

can be taken out in different amounts anytime during the winter months, which permits you to order more now at the market price. See our representative, or write

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.



SILOS

PHILADELPHIA (WOOD STAVE)
KEYSTONE (WOOD STAVE)
CENTURY (CEMENT STAVE)
UTILITY (GLAZED TILE)

RIGHT PRICE—TERMS—SERVICE

"When You Want a SILO See SCHLICHTER"

E. F. Schlicher Co.
10 S. 18th ST., PHILA.

WOOD TANKS
FEED TRUCKS

SILOS

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY

PAINTS AND VARNISHES

Write for Color Cards and booklet "Paint Pointers"

EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE
PRINTER

BELL PHONE No. 1 WEST CHESTER, PA.

FOR SALE

One Model D Majannier Milk Tester equipped for 110 volt direct current. This machine has been used only a few months, is in perfect condition, and will sell at a bargain.

HERSHEY CREAMERY CO., Harrisburg, Pa.

E. NEWLIN BROWN
Live Stock Auctioneer
WYCOMBE, BUCKS CO., PA.
Sales Anywhere —Anytime

SOUTHERN NEW JERSEY DRIVE COMPLETED

The recent membership drive in Southern New Jersey counties has been completed. 186 new members with a total of 1439 cows were signed and a large number of transfers and corrections reported. The size of the herds varies from an average of about 5 cows in Cumberland county, which is largely a trucking center, to 10 cows in Salem county, where dairying is carried on more extensively.

It has been the practice to carry on campaigns for members in territories where a large proportion of the farmers are not lined up with the association. In each case an effort is made to reach every dairyman shipping to each station. This is obviously impossible when, as is the case with our men, a large number of calls must be made per day. Some men are not at home, and in other cases it is impossible for one reason or another, to interview the dairyman. Each canvasser's route is given him when he starts out in the morning and it is often impossible to arrange satisfactory routing on the left-overs who have not received calls. Because of this there are always some men in the community who have not received a visit from Association representatives.

In South Jersey at some of the stations there are a considerable number of dairymen who have not received a call from our fieldmen. It should be uppermost in the minds of those who have joined that they are now a part of this farmer's organization and if they help their Association they are helping themselves. Those men, like our members everywhere, can do an inculculable amount of good if they will talk to their unorganized neighbors and try to induce him to lend his support to co-operative marketing.

One matter that is most noticeable to fieldmen who work in the different localities in the Philadelphia Milk Shed, is variations in organization spirit. In many sections the large proportion of dairymen are proud of their organization, know the accomplishments it has behind it, and are willing to uphold their belief by pointing out the facts to others. In some sections a laxity in spirit has grown up mainly because the individual believes that when he signs a contract his duty to his organization is over. In time it is hoped that every locality will come to understand that co-operation means the hearty support of every co-operator and that if that support is not forth-coming the result is a slap in the face for the organization and therefore the individual, member as well. When every member in a locality has that feeling of individual responsibility, then we say the section has the "co-operativ spirit". This is the spirit we wish to build everywhere and most particularly in newly organized territories.

If you have a neighbor who is not a member tell him of the Producers' Association, loan him your "Review" and let him know the history and accomplishments of the organization. If you don't know the latter, write to your central office and find out.

Local branches of the Association are already established in almost every community in the Philadelphia Milk Shed. The duplicate contract which each new member receives will show in what local he has been placed. That individual should inform himself as to his local officers and use any effort which he can to make his local one functioning with a live and healthy organization spirit.

The Great Chester County FAIR

September 3-4-5-6 1924

West Chester Penna.

New Rules
Revised Listing of Live Stock

FOUR BIG DAYS

Full of Educational Features, Recreation and Amusement

Send for PREMIUM LIST

Norris G. Temple
SECRETARY

Box 25
West Chester, Pa.

Concrete Barnyards Pay for Themselves Many Times Over

Permanent, sanitary, and economical in every way, Concrete paved barnyards pay for themselves many times over.

They save *all* the manure, liquid as well as solid. They save every fertilizing element for enriching your farm. Any kind of stock fed on a Concrete floor gains greater weight and gains it more rapidly.

Concrete floors also give you more time. They put an end to tramping around in mud. That's important in more ways than one. The women folks deserve this consideration. You know they hate muddy boots.

And Concrete barnyard pavements are easy to build. Even though you have had no experience in Concrete work, you will have no difficulty if you follow our simple instructions.

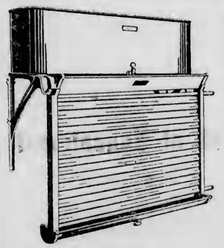
Send for Free Booklet

We have a practical little booklet which tells just how to pave your barnyard with Concrete. A free copy will be sent you on request. Ask for "Concrete on the Dairy Farm."

PORTLAND CEMENT ASSOCIATION
1315 Walnut St. PHILADELPHIA — 347 Madison Avenue NEW YORK
Union Trust Building WASHINGTON, D. C.

A National Organization to Improve and Extend the Uses of Concrete

Offices in 27 Other Cities



Chester Producers' Milk Cooler

All copper, everlasting. Built just like the big Chester Factory Milk Cooler, with seamless copper tubes and brass manifolds. Will stand 150 pounds pressure. Easy to clean. Cools within two degrees of water. Very reasonably priced. Made in four sizes.

Send for our new catalog

Get a copy of the new Chester Milk Producers' Catalog. It is yours for the asking. Keep it on hand for ready reference. It contains a fund of useful information. Send for it today—without obligation of course.

CHESTER DAIRY SUPPLY COMPANY
CHESTER, Dept. I PENNA.

FEED CALVES ENOUGH BUT DON'T OVERFEED

Need from 6 to 12 Pounds of Whole Milk Daily for First Three Weeks

Feed the calves enough, but don't overfeed them. They will do better if kept just a little hungry. Over feeding causes digestive troubles.

These are some of the suggestions made by the department of animal husbandry of the state agricultural college at Ithaca on the raising and care of calves.

The first thing to remember, says the college, is that no calf should be raised for dairy use unless it comes of first class parentage—from a pure bred sire and a high producing dam. Granting this heritage, the dairy calf will respond to, and should receive, careful handling.

It is best to let the calves stay with their mothers for two or three days after birth. Then they should be taught to drink from a bucket. Care should be taken to see that the pail is clean, for, as every farmer knows, calves are subject to digestive disorders.

The calf should get from 6 to 12 pounds of whole milk daily for the first three weeks and then may be gradually switched over to skimmilk and a little grain. Most farmers find it best to give the calf its grain immediately after it has finished drinking the milk. A good concentrate allowance will contain muscle and bone building nutrients and will contain some fat to replace a part of that abstracted from the milk.

Here are three rations which have been found good:

Corn 3 parts, bran 3 parts, oats 3 parts, oil meal 1 part.

Corn 5 parts, oats or bran 3 parts, oil meal 1 part.

Oats 3 parts, bran 1 part, oil meal 1 part.

HOG CHOLERA LOSS $27,000.000

Hog cholera caused a loss of more than $27,000,000 to the swine industry of the United States during the year ended April 30, 1924, according to a recent compilation by the United States Department of Agriculture. More than half of the total loss occured in the Corn Belt States where hogs are especially numerous. A comparison of the number of hogs with the loss caused by cholera in each State shows that the ravages of the disease are approximately in proportion to the hog population.

In computing the losses from hog cholera, specialists of the Bureau of Animal Industry estimate that 80 per cent of losses from all causes are due to this dread disease. Most of this loss can be prevented by the proper sanitation and the preventive-serum treatment. Bulletins giving full information on hog cholera, its control and prevention may be obtained on request from the United States Department of Agriculture, Washington, D. C.

SANITARY INSPECTIONS MAKING RAPID STRIDES

(Continued from page 1)

The new sanitary regulations are in effect and they will be enforced.

In justice to the thousands of producers who have put forth sincere efforts to meet the provisions of the regulations, thereby protecting their market some action must be taken that will bring the careless and doubtful producer into line.

Larro Produces Winners in Notable County Tests

Larro-fed winners, in Holstein and Jersey herds alike, are conspicuous in recent reports of Cow Testing Associations in many parts of the country. In the Fairfax County (Va.) Cow Testing Association No. 1 the average production of Larro-fed herds was 9,923 pounds.

Holstein Champions

Sadie, champion grade cow of the South, and second high grade cow in the world, was high cow of the Fairfax County Association in 1923, producing on Larro, 23,157 pounds of milk.

In this same test, the five high cows, the first three high herds and four of the first five high herds were 100% Larro-fed.

In Michigan, Lilith Segis Inka DeKol Johan (Shiawassee County, C. T. A.) owned by J. E. Post, Durand, made on Larro a world's record for her class, 862.6 pounds of milk in seven days and 3,435 pounds in thirty days.

Jersey Records

Seven Jerseys from the Carroll County (Ohio) Cow Testing Association made in thirty-one days on Larro a low of fifty-five and a high of seventy-five pounds of butter fat. Raleigh's Adelaide Addie of this association made an average of 1057.2 pounds of milk and 55.16 pounds of fat per month for eight months.

Pennsylvania provided a state champion Jersey, 3-year old Prince's Rose of M. B., who made on Larro 14,292 pounds of milk and 639.5 pounds of fat.

These official records prove the value of Larro in maintaining condition and sustaining production.

Such results can be obtained only from a ration that is uniform, perfectly balanced, of high nutritive value and absolutely free of foreign and harmful materials.

Larro

THE LARROWE MILLING COMPANY
120 Larrowe Bldg. Detroit, Michigan

See the nearest Larro dealer, or write us direct (512)

UNADILLA SILOS

Read Silo Character
As you do a man's

YOU read a man's character in his *face*. Look to the same features on a silo to judge its qualities.

In the front of the Unadilla Silo, you can see many practical, valuable advantages that speak of the thoroughness, care and thought with which every detail of the whole silo is worked out.

Its continuous opening; water-tight, air-tight, non-sticking doors; wide, safe, easy combination door fasteners and ladder; door front assembled at the factory; hoop ends adjustable from ladder, these and many other features of the front of a Unadilla are some indication of the bigger silo value the Unadilla gives you for every dollar.

Send for catalog. You'll find it full of silo information you shouldn't miss.

For the man who orders early we offer a special discount that makes a real saving in your silo purchase.

The Unadilla can be had on convenient terms.

UNADILLA SILO COMPANY
Box D Unadilla, N.Y.

A little bit every day in the garden is better than temporary neglect with later struggles to cultivate it and keep down the weeds.

What Every Farmer Knows

That the most complete display of implements

The largest array of thoroughbred livestock

The largest exhibition of poultry

and

The most attractive premiums are

A Few of the Features

TRENTON FAIR

Six Days — Four Nights

Sept. 29 to Oct. 4, inc. 1924

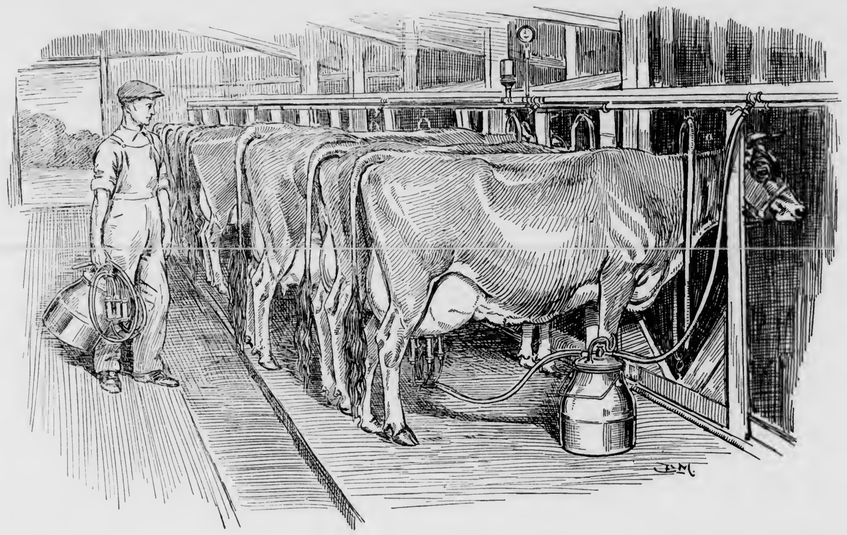
M. R. Margerum, Sec'y
Trenton, N. J.

CRUMB'S Chain Hanging Stanchi ns

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.



"I took your statement regarding the performance of a De Laval Milker with a grain of salt"—

said Lewis A. Toan, of Perry, N. Y., a breeder of purebred Guernseys, who goes on to say:

"We use the De Laval Milker and I am so well pleased with it and your De Laval Service that I want to express my appreciation. We were 'up against it' for help before we put in the De Laval Milker, with a stable of 24 cows and part of them on test milking three times a day. I must say frankly that I took your statement regarding the performance of the De Laval with a grain of salt.

"I am really surprised that the De Laval Milker can milk so fast and so clean. It is easy for me to handle the two single units, strip, carry and weigh the milk for our herd. Our bacteria count, by the way, is low—seldom over 10,000.

"We appreciate the Milker, and another thing—the De Laval Service, which you apparently forgot to emphasize when I purchased our machine. That in itself is worth a lot to a beginner. If anyone wants my opinion of the Milker, tell him to call me up."

There are thousands of other De Laval Users who feel just the same way. If you are milking 10 or more cows, a De Laval Milker will soon pay for itself in saving time and in extra milk of better quality produced through its use. Sold on easy terms.

The De Laval Separator Company

NEW YORK 165 Broadway — CHICAGO 29 E. Madison Street — SAN FRANCISCO 61 Beale Street

Sooner or later you will use a

De Laval

Milker and Cream Separator

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME V — WEST CHESTER, PA., AND PHILADELPHIA, PA., SEPTEMBER, 1924 — NUMBER 5

ELECTRICITY ON THE FARM

How It Is Used and What It Costs

By AUGUST A. MILLER

The use of electrical current on the farm has been steadily advancing. Its general use, however, has been confined to sections of the country where costs of installation and power were available at a reasonable cost.

The Rural Electric Service Committee of the Pennsylvania State Council of Agricultural Associations is actually engaged on the task of getting electricity on Pennsylvania farms at reasonable rates.

At a recent hearing before the Public Service Commission in that state, the public utility companies stated their desire to co-operate fully on this question with a view to recommending methods and plans to further the work of the commission, which has voluntarily engaged in studying this problem with a view of establishing just and reasonable rates for installation and power in that Commonwealth.

KNOWLEDGE OF ELECTRICAL SERVICE

At this time the knowledge on the part of the farmer in general is meagre. He is little informed on the subject and rates and terms are confusing. The Kilowatt Hour has little in common with farm practice. Energy rates mean nothing. What he does know is that it costs so much money, either as cost of added lines from nearby electric wires and so much for the current he uses. Considerable education is necessary along these lines.

THE KILOWATT HOUR

For the purpose of general information, the Kilowatt, from the standpoint of electricity, represents 1 1/3 horse power, and the Kilowatt Hour is equivalent to the use of one kilowatt for one hour.

QUANTITY OF POWER REQUIRED BY FARMS

How many kilowatt hours (K. W. H.) per month will the average farm consume?

Experience shows conclusively that the answer to this question depends entirely on the rate charged for electricity.

An examination of the rate schedules from 17 pubic utility companies in Pennsylvania show rates varying from 10 to 30 cents per kilowatt, based on 50 K. W. monthly, to from 8 to 16.5 cents per kilowatt, based on 100 K. W. monthly use.

A rate of ten cents per kilowatt would probably cause the farmer to confine his use of current for lighting purposes only, with the result that his consumption would be held down to from twenty-five to thirty kilowatt hours per month.

COST OF CURRENT IN CANADA

In Toronto Township in Ontario, 798 rural consumers use on an average of 44.8 kilowatt hours per month, for which they pay 6.21 cents per kilowatt hour.

The Grand Champion Holstein Cow, Farmers' Classes, at the Montgomery County Farm Bureau Picnic, Schwenksville, Pa., was won by H. D. Allebach, Trappe, Pa. (left). Second and fourth prizes were taken by Wm. H. Landis and third prize by John Pfrommer.

One dairy farm in Ontario, as reported by a representative of the Hydro-Electric Commission of that province, consumes slightly more than 300 kilowatt hours per month. This includes the use made of a 3 horse power milking machine, milking about 80 cows, lighting, grinding feed, sawing wood, pumping, threshing, filling silos, vacuum cleaning, electric flatirons, and a washing machine.

CURRENT IN OHIO

A bulletin devoted to a report of kitchen tests of various fuels used for cooking, including electricity, which were made by the Department of Home Economics of the Ohio State University, gives the results of what is stated to have been a careful study, made by personal inspection of fifty representative electric cooking customers out of a total of 300 using electric power at the rate of 3 cents per kilowatt hour. The electric energy is said to have come from a water power adjacent to the town. The average consumption of electric energy by these 50 consumers, as computed from their individual bills, was 120 kilowatt hours per month.

WAUKESHA STATISTICS

Waukesha County, in the state of Wisconsin, enjoys a widespread rural electrification, which, judging by the satisfaction expressed by the company which supplies the service and the farmers who receive it, is highly successful.

Rates for rural service established in October, 1920, are still in effect and are deemed satisfactory both by the company and consumers.

The use of current, covered by this survey shows the use of electricity for 23 separate classes of work on the farm and farm home.

These rural rates of the Milwaukee Electric Railway and Light Company, supplying Waukesha County are such that the following monthly bills and average costs to the consumer per kilowatt hour obtain.

	50 KWH consumed per month		100 KWH consumed per month	
	Month bill	Av. per KWH	Month bill	Av. per KWH
4 actice rooms	$3.05	6.1c	$4.80	4.8c
7 active rooms	3.73	7.46	5.48	5.48
10 active rooms	4.40	8.8	6.15	6.15

The company is responsible for the following figures:

Period	Number of rural consumers, mostly in Waukesha Co.	Kilowatt hours per month per consumer	Av. monthly revenue per consumer	Av. rate per kilowatt hour cents
June 1922	174	111		
December 1922	137	135		
Average	156	121	$6.42	5.3

There are on these lines close to 180 rural consumers, nearly all of whom are farmers. Eighty-two of these responded to a recent questionnaire with the foregoing results.

The three largest farms reported contain respectively 1200, 640, and 485 acres, while the three smallest holdings were 1, 1, and 4 acres.

The average characteristics of all the farms reported are as follows:

Total average acreage of farms	129.0
No. of acres usually under cultivation	84.0
Number of horses	4.3
Cattle—less calves	23.5
Calves	5.0
Usual number of cows milking	17.8
Number of pigs	5.8
Number of sheep	9.0
Number of chickens	129.0

The average of 61 monthly bills for the winter months was $11.50.

The average of 32 monthly bills for the summer months was $6.42.

The electrical energy in the winter averaged 250 kilowatt hours, while the summer average was 127 kilowatt hours.

The three largest consumers aggregated 11,390 kilowatt hours per month. If these accounts are eliminated the average monthly consumption carried the remaining bills for the winter months to 115 kilowatt hours, and an average cost of $5.94 per month.

Reduced to terms of summer and winter consumption, these figures may be reduced to a basis of 5.06 cents and 4.6 cents per kilowatt hour.

Waukesha County is 24 miles square and its farms are largely given over to dairying and stock raising. Compared with Pennsylvania counties, there is nothing unique about Waukesha County which should make it a better field for rural electrification than some counties in this state. Counting all farm products there are five counties in Pennsylvania which produce greater values every year per square mile than Waukesha County. Eight Pennsylvania counties possess greater values per square mile in farm implements and machinery and eleven counties have more cultivated acres per square mile.

The Rural Electric Committee is making every effort to assist the Pennsylvania Public Service Commission in arriving at a rate and installation cost for farm service that will be fair to the

(Continued on page 5)

CONCRETE SILO CONSTRUCTION

By N. S. GRUBBS

The building of silos to take care of the immature crop, which is likely to be caught by frosts, is the need of the hour. This fact is being discussed by agriculturalists and farmers throughout the East who fear the large bulk of field corn will not develop ears.

Selecting and building a silo brings a lot of factors into play which under ordinary seasons would not exist. Consideration should be given to the size, kind and construction of the silo to conform with the other buildings and at the same time give service for a large number of fillings. A good silo on every dairy or beef cattle farm is a good investment any year.

BUILD FOR PERMANENCE

The concrete silos are preferred by many farmers because they are low in first cost, wind-proof, vermin-proof and fireproof.

Concrete stave silos have been erected in the western states in large numbers and now we find them appearing in the East in quite a few sections. As a rule they are erected very similar to the wooden stave and for about the same expense as a good wooden silo.

MONOLITHIC SILOS

Where sand and gravel is found on the farm it is often advisable to construct the silo of monolithic concrete.

CONCRETE MATERIALS

Materials required for concrete are portland cement, sand, pebbles or crushed stone and water.

Any standard brand of portland cement may be used.

Sand and pebbles or broken stone are called aggregates. Sand is known as fine aggregate; pebbles or broken stone as coarse aggregate.

Sand should be clean and well graded. By well graded is meant that the grains should vary in size from fine up to a diameter of 1/4 inch for the largest particles. The sand must be free from vegetable or other foreign matter. If it is dirty it should be washed before being used.

Either pebbles screened from the ordinary gravel bank or crushed rock may be used for coarse aggregate. If pebbles are used they must be clean and free from any coating of clay or other foreign matter and should range in size from 1/4 to 1 1/2 inches. If crushed stone is used it should have the same grading as the pebbles and should be free from dust. Bank-run gravel, which means the natural mixture of sand and pebbles just as taken from the gravel bank, should not be used until screened so that the sand and pebbles may be correctly reproportioned. There are such variations in the relative volumes of sand and pebbles in each gravel bank that concrete made from such material will not be uniform in strength.

Water used for concrete should be clean and free from acids, oils, or alkali. Any water that is fit to drink is suitable for a concrete mixture.

Concrete of three different proportions is used in building monolithic silos. A 1:2 1/2:5 mixture is satisfactory for the foundation and the floor. This means one sack or one cubic foot of portland cement 2 1/2 cubic feet of sand and 5 cubic feet of pebbles or broken stone. For the walls a 1:2 1/2:4 mixture is used. For the roof use a 1:2:3 mixture. All the materials are proportioned by volume, a sack of cement being considered 1 cubic foot.

The trench for the footing extends 8 inches below the excavation proper, and is 2 feet wide.

A concrete silo is usually built so that the floor will be about four or five feet below ground level. This insures that the bottom of the foundation will be below frost line. The height of the silo above ground is also reduced by this much, thus lessening the distance through which scaffolding and other material must be raised. The depth of the silo below ground is seldom over 5 feet as it would be difficult to throw out the last of the silage from a greater depth.

Floor and footing are placed in one operation. If the ground on which the silo wall is not firm the footings should be widened to 4 feet and reinforced with 3/8 inch square rods laid 8 inches apart across the footing and about 1 1/4 inches from the bottom.

Solid Concrete Silo and Dairy Barn

As the concrete is beng placed for the footing, lengths of 3/8 inch or 1/2 inch square twisted steel rods are set vertically in the footing, 30 inches apart. These form vertical reinforcing for the silo wall and are placed in the center of the footing, so that they will project upward into the center of the wall. After floor and footing have been in place 24 hours, construction of the silo walls may begin. Before these are started, clean the top of the footing, removing all loose material. Then apply a paint of cement and water mixed to the consistency of cream to help secure a good bond and tight joint where wall and footing join.

BUILDING THE SILO WALLS

There are seven operations connected with building the walls: (1) The forms must be set; (2) Reinforcement must be placed in proper position; (3) Concrete mixed and placed; (4) Outside form released, raised and reset; (5) Reinforcement placed for the next course; (6) Inside form released, raised and reset; (7) Provision must be made for openings in the walls for doors and the details for the chute arranged.

An outside form will not be necessary for that portion of the wall below ground if the earth is firm enough to stand without caving, otherwise both inner and outer forms will be required.

Horizontal reinforcement should be wired to the vertical rods already set when concrete was placed for the foundation and footing. Ordinary No. 12 or No. 14 gage wire will serve to tie vertical and horizontal rods together where they intersect. Where it is necessary to splice horizontal reinforcing, 3/8 inch rods should be lapped 18 inches and 1/2 inch rods 2 1/2 feet. For vertical reinforcing a lap of 18 inches will be sufficient. The first ring of horizontal rods should be placed 2 1/2 inches above the silo footing and from this rod upward. After the horizontal reinforcement has been properly spaced and securely wired to the vertical rods to hold it in proper position, the inside form may be set and carefully leveled, then 1:2 1/2:4 concrete as already specified is placed in the forms, care being taken, if no outer form is used, not to allow earth to fall into the concrete while placing it. Concrete should be of a consistency that will permit it to be readily settled in the forms and around reinforcement.

Each day the outside form is raised to within 4 inches of the top of concrete last placed, the vertical rods spliced if necessary, and horizontal rods attached to them for the next course. The inner form is then raised, leveled and plumbed, and concrete placed to fill the forms for this course. To keep inner and outer forms the proper distance apart, a number of spacers 6 inches long may be used. These can be of wood and should be removed as concrete is placed up to them.

Concrete must be well settled into the forms in order to secure a smooth, dense wall. A spading tool made from a piece of thin board beveled at the lower end and shaped to have a handle at the other is worked down between concrete and form face to force pebbles or broken stones back from the form, allowing mortar to come against the form and produce a dense, smooth surface. The inside of the wall especially should be given particular attention in this respect to prevent the formation of irregularities or offsetting projections where the courses join.

Before considering a day's work finished, the top surface of the concrete in the forms should be roughened to provide a good bond for the next course, and just before placing concrete for the next course the top of the wall should be washed with water and painted with a cement grout prepared by mixing portand cement and water to the consistency of thick cream.

Concrete for the upper courses of the wall can be raised in large buckets or receptacles designed especially for this purpose. It should be hoisted by means of a rope and pulley by horse-power, as the labor of hoisting by hand is tiring. Many of the small concrete mixers driven by gasoline engine are provided with a power-driven drum, upon which a rope may be wound for hoisting concrete, scaffolding, door forms and other material.

When home-made forms are used, the chute over the doors is built after the wall is finished.

When commercial steel silo forms are used, the chute is generally built at the same time as the silo wall and monolithic with it.

Forms for door openings should be ready when work on the wall is started. It is a good plan to oil or soap the door forms so as to make their removal easy. Extra care must be used to work the fresh concrete around the door openings so as to secure a smooth surface finish and to insure a close air-tight fit between door and concrete.

A Scandinavian in North Dakota took out a membership in the farm bureau. About six months later the Department of Agriculture, at Washington, received the following letter from him:

"I bane sign up for your farm bureau. Not yet received it. Marm she have want board at our house and wife wants bureau for spare bedroom. For why you not send it yet? Tell me."

He received the following letter in reply:

Dear Sir: Yours of 23 inst. to hand and beg to say, that we have no bureaus in Washington that we can send out at the present time. However, we have an "A1 Farm Bloc," and as soon as we lay our hands on it, we will have it sawed up, made into a farm bureau and sent to you.

SUMMER DAIRY FEEDING

If grain has not been fed while the cows have been on pasture, start now before they start to shrink in milk production. After milk production drops, it is impossible to bring it back. If pasture is still good, corn and oats are sufficient. If pasture is poor, some protein feeds such as gluten, cottonseed meal or linseed oil meal should also be fed with the corn and oats. Feed one pound of grain to each five or six pounds of milk daily.

OVER 16,000 PERMITS ISSUED

Inspection Forces Busy — Final Inspections Under Way

The inspection forces of the Quality Control Department of the Philadelphia Inter-State Dairy Council have been devoting a good share of their field work to reinspection of farms on which the preliminary inspections were made some months ago.

Many of the farmers have won their right to a Permanent Permit, particularly where the necessary amount of rebuilding was small and such requirments needed only minor changes. In some cases it involved only the purchase of small top milk pails.

On the other hand some farmers during the wet weather have made substantial changes in the remodeling of stables, buildings and milk houses, remodeling bad ceilings and other numerous changes which they had planned to make. Field men on reinspection work found that farmers are going right ahead with their improvements and will be in fine shape to go ahead when cooler weather sets in and the crop work is off their hands.

The belief that there would be no reinspections following the original visits of the inspectors is being rapidly dissiminated. Reinspections have followed in districts in some sections where this belief prevailed and it was found that probably ten per cent. of the farmers had failed to make the improvements.

During the past month a large share of the inspection work has been in New Jersey and the Maryland-Delaware section. During the coming month the field forces will begin work in the western part of the Pennsylvania territory.

TIME OF REINSPECTION

Milk producers should not infer that because the inspectors have not visited your farm that there has been any let up in the work. The Philadelphia Milk Shed with over 14,200 temporary and 1,930 permanent permits already granted, means a big piece of work. Already nearly 10,000 farms have been visited, some of them a number of times, as may be noted by the number of permanent permits granted.

Field men also find as time advances since the regulations went into effect that some of the producers are more or less indifferent as to the value of the work.

It has been impossible with the limited forces available to follow inspection work immediately after the various meetings held in some districts, explaining the inspection work. In such instances there has been a disposition to belittle the project. Temporary permits have been lost or mislaid by the farmers and there is greater difficulty in carrying out the farm field work. Milk producers should hold their temporary permits—have them handy. Their loss only delays the work. Farmers must have a temporary permit when the inspector calls on them. Failure to have such a permit may result in the loss of your milk market.

SMALL TOP PAILS

Small top milk palls must be used under the sanitary regulations. This does not mean small top pails purchased but never used. Actual use of small top milk pails will be insisted upon. Many dealers are flatly refusing to receive milk from inspected plants from producers where it is ascertained that small top pails are not in regular use.

TENANT FARMERS

Where tenant farmers are making changes to other farms for the coming year particular attention should be paid to conditions on the new farm.

No extensions of time are in contemplation under such conditions. Tenant farmers have been given every opportunity to meet this provision and have been granted some leeway on farms now occupied where owners have refused to co-operate in the clean-up work.

If you move be sure that your farm buildings and facilities on the new farm already meet the sanitary regulations.

WHAT THE REGULATIONS DO

What are the Sanitary Regulations doing for the farmers' milk supply?

One receiving station agent who was not very favorably inclined to the clean-up program has approved of the new Sanitary Regulations in every particular. Why? He found that after the farmers had cleaned up and were producing milk under the regulations that the milk delivered to the station was materially better. That the proportion of milk rejected at the receiving station door was naturally smaller than under the old system.

It became evident that milk carefully prepared means a larger percentage of marketable milk and therefore means a return of more money to the producer throughout the year and without doubt a larger milk check.

This same receiving station man said "That on hot, sultry days last year he often sent home enough bad milk each day, the money value of which would easily buy a cow."

This district was inspected last spring and farmers were thus able to care for their summer milk supply.

International Institute of Co-operation

Important Organization Meeting Is Held

The Agricultural Co-operatve movement was a distinct step forward. At Cleveland on August 11th and 12th, when a conference was held at which were representatives of the larger lines of co-operative endeavor among farmers of the United States as well as representatives of the United States Department of Agriculture, Bureau of Agriculture Economics, and of many of the agricultural colleges. The purpose of the conference was to outline more fully a plan for holding an institute of Co-operation for the summer of 1925. About forty persons were present durng the conference.

PLAN AND SCOPE

The following statements of the purpose and scope of the International Institute of Co-operation were presented by a committee, and after numerous amendments were approved as embodying the right spirit and thought of the group present.

The Institute will afford a clearing house for discussion among persons actively identified with or interested in co-operative organizations. Thereby a valuable fund of experience will be available to all who have co-operative problems with which to deal. It should be a training school for leaders and managers in co-operative enterprises, teachers in colleges and research and extension workers.

The co-operative form of organization will be treated as an agency for promoting the economic and social welfare of the public, and for establishing closer relations between producers and consumers, thereby contributing to the elimination of waste and friction in the distribution of commodities.

The organization and management of co-operatives and the technique of co-operative marketing of farm products will receive especial emphasis during the session to be held in 1925, without neglecting other important aspects of co-operation.. During each week of the Institute special consideration will be given to the marketing problems of specific commodities or special lines of co-operative business.

It was decided that the field of endeavor would be best represented under the name and title of the International Institute of Co-operation, operated under the direction of an unincorporated body of five delegates, to be known as the General Assembly.

The Institute shall be incorporated as a non-stock, non-profit organization, without fees, dues or assessments, and its revenues shall consist wholly of voluntary contributions, gifts, bequests, and endowments and tuition charges to be determined by the Board of Directors of the incorporated institute.

A large number of colleges sent in written and verbal invitations for the holding of next year's conference. There was much discussion as to where it should be held and the final selection was left for decision to the future conference to be called some time in the year, when other invitations, which it was understood were on the way, would be in.

It was the thought of those present that the Institute should have a very broad program with opportunities for special discussions to be participated in by particular groups. It was the thought that a large number of people would want to attend all the sessions of the conference, which would last four weeks, and the other groups which would not be able to stay so long, but come in for one or more weeks, the program being so arranged that the interests of special groups would be served to best advantage during those weeks, but that the program for the four weeks should furnish a complete exposition of the theory and practice of co-operation. A number of those present were certain that the co-operative movement should have full opportunity for future conferences with the manufacturers, wholesalers, retailers, or consumers of the various kinds of agricultural products which are now sold so largely through co-operative channels.

It was quite evident from the discussions at the various sessions during the few days that the instructors in marketing and economics at our colleges are very keen to have the opportunity of coming into direct contact with and hearing the experiences of those men who are actually engaged in organizing and managing successful agricultural co-operative enterprises. On the other hand, those who are in the work of co-operative marketing or buying are equally desirious of obtaining a fuller knowledge of the principles which have been involved by a scientific research work on the part of the governmental bureaus and our colleges represented at this conference.

Spraying Effective in Beetle Damage Control

That spraying can be made effective in control of Japanese beetle damage to fruit and foliage in apple, peach and cherry orchards, was one of the observations made recently by more than 75 entomologists who visited the experimental orchards near Riverton, New Jersey, where the United States Department of Agriculture is cooperating with the State Departments of Agriculture of Pennsylvania and New Jersey in an extensive project to curb beetle ravages.

More than 100 acres of orchards in the heart of the infested area are being used in these experiments this year. The results to date indicate quite conclusively that fruit growers can prevent the serious foliage damage by spraying. Several orchards including apples, peaches and cherries, were visited by the entomologists and in each case, the foliage of trees which had been given a satisfactory spray showed very little, if any, damage, while the unsprayed were badly eaten by the beetle.

Bulletin 390, recently issued by the Bureau of Plant Industry, Pennsylvania Department of Agriculture, gives recommendations for spraying as well as other valuable information and can be had upon request.

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Editorial

Close attention is being given to the conditions surrounding the fluid milk markets by every organized producer of fluid milk.

The present market situation is in a disturbed condition. Because of present depressed conditions of business and industry, consumption of fluid milk throughout the large consuming centers has not been normal. This is particularly true of Philadelphia because of the large portion of workers who are on short time or out of work. It is impossible at the present time to predict with any certainty as to the future. We therefore urge extreme caution with regard to production for the coming year or at least until business conditions become normal.

Producton, with grain feeds steadily increasing in cost, promises to be on a higher cost level during the coming winter. Higher production, therefore, can only be at the expense of greater cost.

Watch your step! Higher costs of production and a relatively smaller rate of consumption make uncertain business conditions. Too much milk—or more than the market will absorb—means unsettled price conditions.

The price of butter which broke sharply early in the summer rallied later due to large quantities of it being put in cold storage. The stocks of butter in storage increase so rapidly under these conditions that during the past month there has been a sharp decline in the price and therefore large supplies of storage butter are awaiting better market prices. Meanwhile the current price of butterfat follows a low price range.

The Philadelphia "Public Ledgers" have been disposed, it would seem to us, in their recent editorials, to look at the farmers situation from a one sided viewpoint.

In a recent issue "About Farming" in connection with General Dawes recent utterences on farm co-operation and collective marketing, it states:

"Collective marketing and the restriction or control of production which it will inevitably lead to will be almost sure to mean higher prices for everything we eat—from bread to berries. Restricted production of staples, which for the moment has greatly increased the income of American wheat, corn and cotton growers, may be extremely good business. But in the final analysis it is bad economics."

Whether the farmer exists and survives has no hearing, according to these journals. The only kind of economics it knows is that which benefits the consumer. It's a poor rule that works only one way.—Editor.

Some of the directors of the Inter-State Milk Producers" Association have been quite participants and winners at county fairs and picnics during the past month.

H. D. Allebach, president, captured the grand championship in the Holstein Fresian breed at the Montgomery County Farm Bureau Picnic at Schwenksville, Pa.

Albert Sarig was an important winner at the Kutztown Fair, in Berks county. His awards in the Holstein Fresian class, pure breds, included first for Holstein Pure Breds; first, second and fourth in the Senior Aged Cow Class; first and fourth in the Junior Aged Class; first in the Junior Yearling Class; first in the Aged Class. Mr. Sarig also took a first in the Senior Aged Class for the Holstein grade cow class.

BUTTER STORAGE EXCESS

The government report of stocks of storage butter in the twenty-six selected cities at the close of business August 8, indicates a further substantial increase in the excess over last year. The stock was 108,994,618 lbs., on the above date against 102,039,423 lbs. on August 2, and an estimated stock August first A. M., of 100,546,306 lbs. Evidently the excess in these twenty-six cities has increased by over 8,000,000 lbs. since the first of the month. If the increase outside the twenty-six cities has been equal to the increase in the twenty-two cities outside the four large markets that are included in the twenty-six it would mean an increase in the country's total excess since the first of the month of over 11,000,000 lbs.

If we estimated the twenty-six cities' total on August 9 (a. m.) as having been 76.5 per cent of the whole it would give a total stock on that date of 142,476,000 pounds compared to approximately 102,100,100 lbs. on the same date last year, a present excess of over 40,000,000 pounds.

Unless more favorable weather conditions soon prevail throughout the butter states it would not be surprising to see the September surplus close to 50,000,000 pounds.

The holdings of cheese in the twenty-six cities on August 9 (a. m.) were 55,248,164 lbs., this being about 2,400,000 lbs. increase since August 1. Evidently the input in warehouses outside the four large markets was heavier than in these four cities. It is probable that the excess over last year in the total stock has been further increased during the first eight days of August. It is now estimated as close to 12,500,000 lbs.

(*The Milk Reporter*)

SILAGE CROP

By E. B. Fitts
Pennsylvania State College

The very short corn crop on many Pennsylvania Farms indicates a serious shortage of silage for winter feeding. Succulence in the ration is a very important factor in economical milk production. Many crops other than corn make a good quality of silage, and, where available, can be used this year to great advantage. Among these crops are grass of any kind, millet, clover, alfalfa, and soy beans, in fact, almost any crop that cattle will eat in green or dried form can be made into silage. The legumes (clover, alalfa, and soy beans) should, if possible, be mixed with corn when put into the silo. Good silage can, however, be made from most legumes alone if careful attention to the following details is given at filling time. (1) The crop should mature as far as possible. (2) When cut in the field let the crop thoroughly wilt in order to remove excess moisture. (3) Cut finely and distribute and pack carefully in silo.

Apple pomace from cider mills makes a very good substitute for silage and may be fed fresh from the press or put into the silo and fed out at any later period.

NEW QUALITY CONTROL DEPARTMENT FIELDMAN

Several new fieldmen have recently been added to the forces of the Quality Control Department of the Philadelphia Inter-State Dairy Council. These men are largely engaged in the Sanitary Regulation work.

Dr. E. G. Lachner, who came with the department in July, is a graduate of the University of Pennsylvania Veterinary School, class of 1918. He was born and raised on a farm in Berks County and practiced his profession in Berks, Montgomery and adjoining counties. His knowledge as a veterinarian should be of particular value to the Quality Control forces.

Ben. G. Marsh, a graduate of the University of Kentucky in 1921, was formerly engaged in County Agent Work in that state. He also did considerable cow testing association work. He was born and raised on a farm and has been in close general contact with dairy work.

CO-OPERATION NECESSARY IN PLAY AS WELL AS WORK

"I perceive," said the Highbrow, after witnessing his first ball game, "that success in this sport can be attained only by perfect co-operation among the players each subordinating his own individuality to that of the organization of which he is a part."

"You may be right at that", remarked the Lowbrow, "but the main thing is team work."

In a better-sires campaign during the period May 15 to June 10, 21 purebred bulls were placed at the head of dairy herds in Bucks County, Pa. Several of the new sires are from a lineage having high milk and butterfat records. The United States Department of Agriculture cooperated with County Agent P. H. Sprenkle, of Bucks County, in conducting the work.

DIRECTORS MEETING

The regular meeting of the Board of Directors of the Inter-State Milk Producers' Association, was held at its headquarters in the Boyertown Building, Philadelphia, August 29th. With one exception the full board of twenty-four directors were in attendance.

Following the reading of the minutes of the last meeting and meetings of the executive committee, since the last meeting of the board, the various reports of committees and action of the executive committee, were each considered.

It was decided to hold the annual meeting of the Association, which comes on December 1st and 2nd, at the Adelphia Hotel, Philadelphia, Pa., and that the accommodations for the annual banquet be limited to 500, that being the capacity of the banquet room.

Mr. Brinton, chairman of the special committee which had been under appointment for four months past to look into the whole question of the present basis of basing our variation in price for varying butterfat content, made an interesting report of the situation to date.

The committee has held a number of meetings and conferences on this subject. The Board directed that a further investigation be made by the committee in co-operation with the Executive Committee and if sufficient progress can be made in the next few weeks it is likely that the matter will come up for final decision at the annual meeting.

W. H. Harper, assistant Director, Quality Control Department, of the Interstate Dairy Council, made a very comprehensive report of the field work of that department in connection with the inspections of dairies under the Sanitary Regulations. Over 15,000 temparary permits had been issued. More than 9,000 farms have been visited by the inspectors and over 1800 permanent permits issued. Approximately 30 per cent of the farms visited are ready for their permanent permits.

H. D. Allebach made a brief report of the work of the Rural Electrical Committee, of the Pennsylvania State Council of Agricultural Associations. The work of preparing for further hearings by the Pennsylvania Public Service Commission, is being pushed rapidly forward. A number of Inter-State Locals have contributed for the support of this movement. The usual contribution is ten dollars for each local in the Pennsylvania territory.

The matter of market conditions was discussed at length. As far as the association is concerned the present Surplus Selling Plan will be continued. It was pointed out however that any large increase in the basic supply, would probably lead to a necessary readjustment. In view of business conditions and the lack of consumption, it was believed that the present basic basis for 1924 remain unchanged.

In view of these same conditions, the customary increase of 15 per cent in the basic quantity for September, was suspended. Milk during this month will be paid for on the flat basic and surplus basis.

Following a general report of production and marketing conditions in the various territorial districts, by the director from that district, bringing out in particular the prospects for an unsatisfactory corn crop, the meeting closed.

LATEST MARKET PRICES

Philadelphia Selling Plan

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1924. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1923.

Beginning with January milk will be paid for on the basic and surplus plan. Milk shipped in excess of the basic quantity will be paid for on the average New York 92 score butter price for the month, plus 20 per cent.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

AUGUST BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

AUGUST SURPLUS PRICE
F. O. B. Philadelphia

Test per cent	per 100 lbs.	per qt.
3.	$1.99	4.25
3.05	2.01	4.3
3.1	2.03	4.35
3.15	2.05	4.4
3.2	2.07	4.45
3.25	2.09	4.45
3.3	2.11	4.5
3.35	2.13	4.55
3.4	2.15	4.6
3.45	2.17	4.65
3.5	2.19	4.7
3.55	2.21	4.75
3.6	2.23	4.75
3.65	2.25	4.8
3.7	2.27	4.85
3.75	2.29	4.9
3.8	2.31	4.95
3.85	2.33	5.
3.9	2.35	5.05
3.95	2.37	5.05
4.	2.39	5.1
4.05	2.41	5.15
4.1	2.43	5.2
4.15	2.45	5.25
4.2	2.47	5.3
4.25	2.49	5.35
4.3	2.51	5.35
4.35	2.53	5.4
4.4	2.55	5.45
4.45	2.57	5.5
4.5	2.59	5.55
4.55	2.61	5.6
4.6	2.63	5.65
4.65	2.65	5.65
4.7	2.67	5.7
4.75	2.69	5.75
4.8	2.71	5.8
4.85	2.73	5.85
4.9	2.75	5.9
4.95	2.77	5.95
5.	2.79	6.

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.85	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37

AUGUST BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	238
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

AUGUST SURPLUS PRICE
Country Receiving Stations

Test	per 100 lbs.	Test	per 100 lbs.
3.	$1.41	4.	$1.81
3.05	1.43	4.05	1.83
3.1	1.45	4.1	1.85
3.15	1.47	4.15	1.87
3.2	1.49	4.2	1.89
3.25	1.51	4.25	1.91
3.3	1.53	4.3	1.93
3.35	1.55	4.35	1.95
3.4	1.57	4.4	1.97
3.45	1.59	4.45	1.99
3.5	1.61	4.5	2.01
3.55	1.63	4.55	2.03
3.6	1.65	4.6	2.05
3.65	1.67	4.65	2.07
3.7	1.69	4.7	2.09
3.75	1.71	4.75	2.11
3.8	1.73	4.8	2.13
3.85	1.75	4.85	2.15
3.90	1.77	4.9	2.17
3.95	1.79	4.95	2.19
		5.	2.21

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations
1924
Average per month

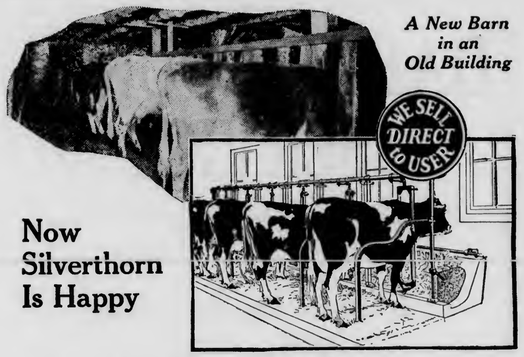
	Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51
June	1.95	1.62
July	1.91	——
August	1.81	——

SEPTEMBER PRICES
F. O. B. PHILADELPHIA
Country Stations

The same prices for basic milk as quoted above under August apply in September, subject however, to change whenever warranted by market conditions.

SECOND SURPLUS MILK

Under the regulations of the Philadelphia Selling Plan, there will be no second surplus milk quotations in July, August and September. Under the provisions of the plan fluid milk in excess of the basic quantity, during these months will be paid for as class one surplus, based upon the average price of New York 92 score butter, plus 20%.



A New Barn in an Old Building

Now Silverthorn Is Happy

HE had a fine herd of cows. He was proud of them. But when he wanted to show them to visitors and prospective buyers they didn't seem to show their value. They were in cramped quarters. His lighting, ventilation and stable arrangement was faulty. He knew this but wondered how he could have a better barn.

One day

He Sent for the Jamesway Book

"Helpful Hints on Building Dairy Barns"

He was surprised to learn how easily he could improve the old barn. No need for a new building. Just a simple change here and there—with sanitary, cow-comfort steel equipment, and behold! his old barn was a delight to bring folks into. This book gave him new ideas, helpful suggestions, and the Jamesway man in his county helped him to carry them out. His biggest surprise was to learn how little it all cost.

Suppose you too send and

Get this Book Yourself

It's filled with illustrations and blue prints. Shows drawings and photographs of old barns made new at low cost. Free to Dairy Farmers; to others, 25 cents in stamps. Get ideas on improving *your* barn. Write us what you have in mind. A post card will do. Write today.

James Mfg. Company
"Jamesway" ELMIRA, N. Y.
Ft. Atkinson, Wis. Minneapolis, Minn.

AUGUST BUTTER PRICES
92 Score Solid Packed

	Phila.	New York	Chicago
1	—	37 3/4	—
2	38 1/2	37 1/2	35 1/2
4	—	37 1/2	—
5	38	37 1/4	35 1/2
6	38 1/2	38	35 1/2
7	38 1/2	38	36 1/4
8	39	38	36 1/4
9	39	38 1/2	36 1/4
11	39 1/2	39	36 1/2
12	39 1/2	38 1/2	36 1/2
13	39 1/2	38 1/2	37
14	39	38	37
15	39	38	36 3/4
16	39	38	36 3/4
18	—	38 1/2	—
19	39 1/2	39 1/2	37
20	40 1/2	39 1/2	37 1/4
21	40	39 1/4	37
22	39 3/4	39	37
23	39 3/4	39	37
25	39 1/4	38 1/2	36 1/2
26	38 3/4	38 1/4	36 1/2
27	39 1/2	38 1/2	37
28	39	38 1/4	37 1/4
29	39 1/2	39	37
30	—	39	—

ELECTRICITY ON THE FARM

(Continued from page 1)

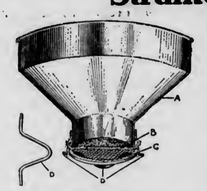
utility companies and equitable to the consumer.

With the data above outlined it is evident that the average Pennsylvania rates can be materially reduced and still show a profit. The larger the consumption of current, the less the cost per unit. This has been clearly demonstrated in the various reductions in current prices which had been made in rate charges in some of our large cities, notably by the Philadelphia Electric Company.

DRAINAGE

There is nothing that shows the benefits of tile drainage more than a dry spell following a very wet spring. Crops grown on poorly drained soils do not develop a deep root system. Crops grown on tile drained land send their roots deep into the soil and gather their moisture from subsoil when the rain fails.

Get a *Guaranteed* Strainer



A. Strainer Funnel.
B. Sterilized cotton through which milk MUST GO.
C. Coarse wire screen ring for clamping cotton pad to bottom of funnel.
D. Wire clamp.

When you buy the Dr. Clark Purity Milk Strainer, you are on absolutely safe ground. For we guarantee our Dr. Clark to remove every last bit of sediment from milk, no matter how fine it may be, and no other strainer will. Make us prove it.

The 10-quart size is ample for ordinary herds with no more than two persons milking. The 18-quart size is ample for large herds, with several persons milking, or using a milking machine.

Simple, durable, inexpensive. No cloths. No fine wire gauze to wear out. But a mighty good strainer which gets all the sediment without fuss or waste of time. If your dealer can't supply you, write

PURITY STAMPING CO.
Dept. F, 243 Champion St.
BATTLE CREEK, MICH.

Two very important factors—time of cutting and method of handling of curing—determine the value of alfalfa hay. Watch them.

DAIRY COUNCIL SERVICE

The various departments of the Philadelphia Inter-State Dairy Council

Is Yours for the Asking Without Cost

You may have Lecturers and Speakers on Health or Nutrition Topics

MOTION PICTURE FILMS ON DAIRYING SUBJECTS

PLAYS FOR THE CHILDREN

LANTERN SLIDES, LITERATURE, POSTERS, ETC.

The Dairy Council has carried the message of "Milk for Health" to thousands of consumers and producers. Why not include those in your community?

There is no charge for this service for local I. M. Pa. Meetings, Community or Local Meeting in the Philadelphia Milk Shed

Let Us Plan Your Entertainment

Write for detailed information

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

THE MILK MARKET

General Review of Conditions in the Philadelphia Milk Shed

There has been little change in the general market situation. Taken on the whole there has been practically no change in the demand and supplies have been well maintained.

Consumption has been on a somewhat lower basis, due, to a certain extent, to the vacation season. Lack of employment in the labor market has alo influenced decreased consumption. Insofar as the vacation period has now passed, some betterment in demand is expected, but little change in the general business situation is likely, pending the coming national election.

Current association prices for fluid milk have been well maintained by fluid milk dealers. Platform prices at some of the big consuming markets have been somewhat irregular—due to conditions of supply and demand. At the leading Philadelphia platform prices ranged from 7½ cents to 5 cents per quart, delivered. The lower price prevailing at the close of the month.

Few buyers are taking on any additional supply of milk as the present output appears to be about equal to the demand. Some buyers have had even more than the customary normal surplus.

An advance of 46 cents for milk for fluid consumption by a nearby association has stabilized the situation to a certain extent. Prices in that district have been averaging as much as a dollar a hundred pounds below the Inter-State Milk Producers Association prices and this advance has materially helped the situation. Condensing plants in the Philadelphia Milk Shed continue to pay slightly less than current prices for their milk supply. This has been due to lower competitive prices paid in other districts and consequently lower selling prices for condensed products. Condensed products manufactured in western organized plants have been the chief factor in this low price movement. The aggregage volumne of milk effected is relatively small and has not affected the general market.

CITY CONSUMPTION

Consumption of fluid milk has been on a somewhat smaller basis. A good share of the decrease has been due to the vacation season.

General business is marking time. There is a materially lower rate of activities in industrial plants. Little real improvement is looked for in this direction until after the November elections. The decreased wage earning capacity of labor has resulted in lower milk consumption.

FEED COSTS HIGHER

With the higher costs of dairy feeds in general there is no doubt but that the actual cost of producing milk will be higher during the winter months. In many sections there has been a good supply of roughage but owing to short production wheat is on a relatively higher basis and the prospects of a corn crop are very much below the average yield and an early frost may make matters even worse. In some cases there will be a very restricted supply of silage corn and the use of substitutes for corn silage is being suggested.

A WORD OF CAUTION

Any large increase in the supply of milk during the remainder of the year is almost sure to react on the price situation. Boarder cows should be eliminated from every dairy herd and the increases due to the interchange with profitable cows is good economy but the wholesale purchase of cows for the specific purpose of boosting basic quantity production is uneconomic, particularly under conditions of high feeding costs and an uncertain market.

BUTTER MARKETS

With the large quantity of butter in storage, following the advance of prices in July, there has been even a larger tonnage of butter stored during the past month. The amount of butter in storage at this season of the year is higher than in any season for ten years back.

This condition has had a depressing effect on the market and throughout August butter prices have been steadily decreasing.

While the range of prices has not been large, running from 37½ to 39½ cents for 92 score butter, solid packed, New York City, the whole tone of the market has been feverish and uncertain.

Surplus prices under the Philadelphia Selling Plan for August are a clear index of the situation. The price of surplus milk, 4 per cent butterfat, during the past month was $1.81 per hundred, as compared with $2.08 per hundred for the same period, one year ago.

Current prices for association milk for fluid consumption continue on a basis of $2.37 per hundred pounds for basic milk, in the 51 to 60 mile zone, for 3 per cent butterfat content, with the usual differential of 4 cents per hundred for each one tenth of one per cent above that basis.

DEMAND FOR DAIRY GRADUATES EXCEEDS SUPPLY

"More students are taking the dairy course than any other of the agricultural courses at Penn State" declares a small folder just issued by the dairy husbandry department at the Pennsylvania State College in which the dairy production and dairy manufacturers courses of the department are outlined with the help of illustrations.

More than twice the number of dairy graduates could be placed profitably as are now available according to a statement credited to the head of the department, Professor A. A. Borland. There are over 100 students enrolled in the department during the regular session of college, and last June about 30 were graduated. The great importance af the dairy industry in Pennsylvania creates a large demand for graduates of the Penn State courses, Prof. Borland says, and adds that he expects a larger number than usual in the coming freshman classes in the school of agriculture to select one of the dairy options. All qualified applicants to the agricultural school can be admitted this year.

It's a mistake to rear a heifer calf (or any other animal) without first carefully considering its heredity.

SPEND A WEEK IN DAIRY LAND

NATIONAL DAIRY EXPOSITION

The big event of the year, the 1924 National Dairy Exposition will be held in Milwaukee, Wisconsin, September 27 to October 4th.

This exhibit, which was held in Syracuse, New York, last year, has again moved to the middle west.

Managers of the show promise even a bigger and better exhibit than ever shown before.

Plans are under way for a most elaborate exhibit covering every variety of dairy products.

There will be many exhibits of the various breeds of dairy cattle, dairy appliances and equipment. Cattle judging, which will be held on each day of the show, should prove extremely interesting.

The following brief outline of the week's program has been announced:

Saturday, September 27th—
Exposition opens at State Fair Grounds.
College Students' Contest in Judging Dairy Cattle.
Factory Machinery and Supply Exhibit opens, Milwaukee Auditorium, 10 A. M.

Monday, September 29th—
College Students' Contest in Judging Dairy Products.
Boys' and Girls' Contest in Judging Dairy Cattle.
International Association of Milk Dealers' Convention opens.
American Dairy Science Assn. Meeting.
City Milk Dealers' Day.
Grade Cattle Judging, Fair Grounds 9 A. M.

Tuesday, September 30th—
Guernsey Cattle Judging begins at State Fair Grounds..
Grade Cow Sale begins.
International Assn. of Milk Dealers' Convention.
American Dairy Science Assn. Banquet.
Creamery Operators' Day.
Dairy Pioneers' Day.

Wednesday, October 1st—
Holstein Cattle Judging begins at State Fair Grounds.
International Association of Milk Dealers' Convention closes.
American Dairy Federation Meeting.
Cheese Factory Operators' Day.
Illinois Day.
National Dairy Farmers' Convention.
Milwaukee Day.

Thursday, October 2nd—
Jersey Cattle Judging begins at State Fair Grounds.
Ice Cream Factory Operators' Day.
Michigan Day. Wisconsin Day.

Friday, October 3rd—
Ayrshire and Brown Swiss Cattle Judging begins at Fair Grounds.
Judging Boys' and Girls' club calves.

Saturday, October 4th—
Final Day.

Other events will be programmed and announcements made as arrangements are completed.

No dairy farmer should miss the opportunity of attending this great exhibit. Here will be shown the last word in dairy cattle, both purebred and grades. Demonstrations of every phase of the dairy industry will be made. The National Dairy Council will have a complete demonstration of its work.

In fact there is so much to see and so many things to learn that the dairy farmer can well afford the expenditure necessary to make this trip and be fully repaid for the money expended.

Special railroad rates are available from all points.

Railroad rates will be on the basis of a fare and one half for the round trip, on the certificate plan. When buying your ticket obtain certificate or receipt for your fare from your station agent. This certificate validated at the National Dairy Exhibit, will enable you to purchase your return fare at one half the rate.

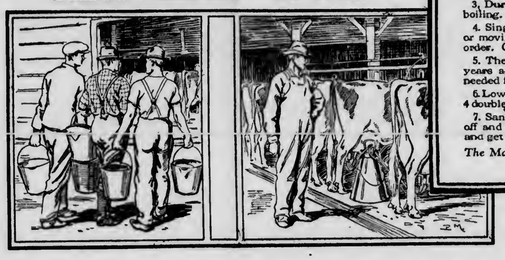
For more definite arrangements as to transportation rates, hotel accomodations etc., communicate direct with the National Dairy Exposition, Room 414, Carpenter Building, Grand Avenue and Sixth Streets, Milwaukee, Wis.

Milk is on the average about 87 per cent water, and cows giving milk need to drink about four times as much as dry cows drink. See that they have plenty that is clean and fresh.

Water-glass for preserving eggs should be used in the proportion of one part water-glass to nine parts of water. The eggs should be clean, smooth and infertile; the container a clean earthenware crock.

A penny saved is a penny earned; follow the price movements when buying feed and make your plans in advance.

WHICH?
Three Milkers—or One



Empire Advantages

1. Teat cup lining is hand made and has linen inserts. Using inserts in the inflation is an exclusive Empire patent—is what gives the complete massage, duplicating the calf's suck.
2. Single or double units to meet your requirements.
3. Durable rubber parts that stand boiling.
4. Single pipe line with no complicated or moving parts to wear and get out of order. Clean. Costs less.
5. The Simple Pulsator guaranteed 4 years against wear. Only one Pulsator needed for a single or double unit.
6. Low power cost. ½ H.P. Motor operates 4 double units, milking 8 cows at a time.
7. Sanitary claw with automatic shut off and without moving parts to wear and get out of adjustment.

The Machine to Meet Every Dairyman's Requirements

With an Empire Milker this *one man* milks 22 cows in 1 hour and 20 minutes

HE does three people's work. That means less wages to pay. And wages saved means extra profits. The Empire Milker is sure a friend to James Riley, R.F.D. No. 1, Harrison Valley, Pa.

It saves the wages of one hired hand.

• • •

It saves his wife the drudgery of milking.

• • •

It saves Mr. Riley the hard work of hand milking.

• • •

Cows now in better condition.

• • •

Cut Down Labor Cost

But read what Mr. Riley says—his own experience—how the Empire Milker came to his rescue. Here is his letter:

"With the Empire Milker I can milk 22 cows in 1 hour and 20 minutes, where it took myself, my wife and a hired man 1 hour and 30 minutes. I can do the work of three people.

"Also I find the cows are in better condition when milked by the Empire Milker. It is easy to care for and we have had the best tests on this farm that they have ever had."

No Other Milker Like the Empire—Except the Calf

Might as well milk into a sieve as to let all your profits ooze away into wages for milk hands. Farmers always wanted to get away from the high cost of hiring hand milkers. And what they are learning now all over America is how to distinguish between the Empire and all other milkers.

Let this fact stick in. The Empire sucks the teat just like the calf sucks it. It's nature's way. The cow likes it. She stands quieter. She makes more milk. She gives milk more days. The Empire gives a perfect three-sided massage of the teat from tip to udder after each suck. No other milker does that. It is a patented Empire feature. That's why men want the Empire, use the Empire, make extra profits with the Empire. No matter what men say about other Milkers, they have only good words for the Empire.

To find out more about the road to bigger milk profits, send for booklet, "How to Milk for Bigger Profits." Just fill out the coupon and mail today.

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Milking Machines

H. E. McWhinney, *President*
EMPIRE MILKING MACHINE COMPANY
Bloomfield, New Jersey
Sales and Service Branches
Elgin, Ill.; San Francisco, Cal.; Denver, Col.; Ottawa, Ont., Canada

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Empire Milking Machine Co., Bloomfield, N. J.

Dear Sirs: Without any obligation on my part, please send me a copy of your free booklet, "How to Milk for Bigger Profits."

Yours,

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Live Stock Auctioneer
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Sales Anywhere —Anytime

"I do hope that you keep your cows in a pasture," said Mrs. Newlywed as she paid the milkman. "Yes'm," replied the milkman, "of course we keep them in a pasture." "I'm so glad," gushed Mrs. Newlywed. "I have been told that pasteurized milk is much the best."

The successful dairyman must weed, feed, and breed, and keep continually at it.

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK FROM COW TO CONSUMER

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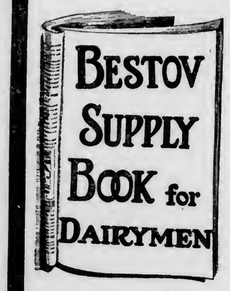

Nearly 100 pages — over 200 articles described, illustrated and priced. Everything the modern dairy farmer needs for handling milk is to be found within the covers of this new Bestov Supply Book.

A copy will be delivered to you by mail entirely without charge if you will ask for one.

Get a copy and spend a few pleasant moments looking through it. Keep it for reference.

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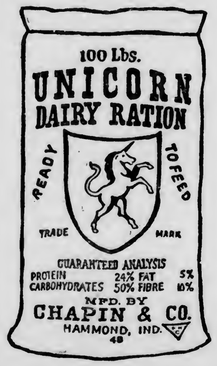

3 bags of UNICORN will make the same amount of milk as 4 bags of most other dairy rations.

Don't take our word for this, but prove it with your own cows.

CHAPIN & COMPANY
CHICAGO, ILLINOIS

MOTOR TRUCKS BRING BULK OF CITIES' MILK SUPPLY

The motor truck is now the most important agency for transporting milk from producer to city distributor, according to the Bureau of Public Roads of the United States Department of Agriculture. The bureau has recently completed a survey of milk transportation for eight large cities and has found that the motor truck, which first entered the field in 1913, when most of the milk was transported by rail and the remaining portion by wagon, is now the major factor in the field.

Of the total amount of milk delivered to the cities investigated the amounts delivered by motor truck were as follows: Baltimore, 45 per cent; Philadelphia, 20 per cent; Cincinnati, 97 per cent; Detroit, 88 per cent.; Milwaukee, 87 per cent; St. Paul and Minneapolis, 94 per cent; and Indianapolis, 94 per cent.

This form of transportation has been of great benefit in developing new milk-producing territories for growing cities and has given the farmers a more satisfactory means of delivering their product. The milk moves directly from the farmer's gate to the city's bottling plant instead of being delivered to the steam or electric railroad station, hauled by rail, and then delivered from the city terminal.

In the Baltimore area a farmer's co-operative trucking association has been organized with a city warehouse, where the milk trucks call for a return load of farmers' supplies.

Gleanings From the Field

ORGANIZATION IN DELAWARE

Owing to harvest activities on the farm no organized drives are being scheduled at the present time, the field membership work of the last few weeks being limited to New Castle County, Delaware. Up to the present time some forty new members have been added to our rolls and a total of approximately 550 cows. This shows a herd average of fourteen cows per farm. These figures give some idea of the intensiveness with which dairying has grown to be practiced in this section.

New Castle County lies south and east of Delaware County, Pennsylvania, and in its northern extremity has much of rolling type of land that makes the Pennsylvania county well adapted to dairying. This factor combined with its proximity to large market centers has been largely responsible for the growth of the counties' dairy industry.

At the southern end of New Castle County the rolling hills flatten out into a broad, flat plain, typical of central and southern Delaware. This country has none of the features of the typical milk producing regions which abound in valleys and brook-fed meadows. The production of wheat is a major industry as would be suggested by the size and tillage of the fields. Beside this broad acre farming there has grown up a very notable dairy industry with herds well above the average of the entire milk shed in size. There have been two very interesting factors contributing to this development. These were, the demand for milk from Philadelphia and the tenanting system, which is practiced so largely in this section.

Receiving stations of Philadelphia fluid milk companies are located at intervals from northern New Castle County far into the southern end of Delaware and the farmer has available an organized and well protected market for his product that would not exist if the state consumed its own milk. A large percentage of these dairymen are tenant farmers working under an agreement, whereby they receive the proceeds from the dairy. This, of course, is an added stimulus to milk production.

It is pleasing to note again that the reaction to co-operation in marketing is very largely favorable even among those who have not been organized up to this time. The majority of the dairymen with whom it has been possible to get in touch show themselves as ready and willing to support the Association in its work. It will be particularly satisfying to complete the present membership work in this territory since that will place the entire state of Delaware among the best organized of the states. A large majority of the producers will then have placed themselves on the side of co-operation and protected marketing.

SOFT CORN FOR SILAGE

A. L. Haecker

The corn crop is from two to three weeks late this year, and with a cool summer and an early frost we will be sure of losing much of the crop. It would be well at this time to plan ways and means to handle this immature corn. The silo is without doubt the best way to take care of corn which is unripe, since it can be made into silage at almost any stage of growth. It is generally admitted, however, that matured corn, just before it turns dry, makes the best silage.

In many of our northern states the growing period is short, which generally means the corn is frosted before it ripens. The silo is used in most sections to take care of the crop, and it is seldom put in until the first frost, thus giving it all advantage of the growing period.

Occasionally we have a year like this one, when the corn goes in late or is re-planted and has a late start. Unless we have a specially warm and favorable summer with a late frost, a good deal of our corn will be caught by first freeze in the fall which always damages the most valuable grain, but invariably the crop makes sufficient growth to warrant from ten to fifteen tons of excellant silage. I have seen excellent silage made from corn planted the first of July, and corn which has been frosted can be put into the silo unless it has turned dry.

Too many of our farmers have an idea that they are losing the value of the corn crop when they put it in a silo. There is every proof available to show that the crop thus harvested will yield from thirty to forty per cent more than it will in any other way. With the average crop, forty per cent of the food value of the corn plant is found in the stalk and leaves. The grain with the best crop amounts to only about sixty per cent. It often happens that with the eatless stalk and many suckers, sixty per cent of the food value is in the stalk and leaves. By putting the corn in the silo at the time of maturity or when the corn is in the dough stage and the leaves are still green, all of the nutriment of the plant is in its best stage for harvest, and in the silo it can all be saved. Farmers who do not have live stock naturally will not be as much interested in this subject as those who do; but even the farmer without stock can afford to put up silage to save his crop, and often can turn a failure crop into one of profit by this method.

The silo has always stood as our greatest corn insurance for whatever we grow, we can save by the silo. Every man who keeps ten head or more of stock should have the silo as a matter of economy and production. This is not a debatable question. It has been proven by hundreds of thousands of farmers and by practically all of our colleges and experimental stations.

It is important at this time to carefully consider our corn crop, and the silo is certainly one way to solve the problem of soft corn.

Mention the name of this paper when writing advertisers

NEW JERSEY NOW EATS MORE THAN FARMS CAN GROW

Survey Shows Population Increase Puts Consumption Above Production

MARKETS RIGHT AT HOME

New Jersey's rich farm lands no longer supply the food needs of its own population. This is the discovery made by agricultural officials in an exhaustive study of the food production and consumption situation in the state, the survey indicating that with the steady increase of population there has been a decline in the area of improved farm lands. Due to intensive farming methods and scientific agriculture, however, the actual total production, even on the smaller acreage, shows an increase.

The changing conditions have made it possible for New Jersey farmers to sell within their own state practically all the food they raise, if distribution plans are improved to meet the opportunities thus created. Of all farmers in America, those most happily located in regards to marketing their products are the New Jersey growers, according to Allen G. Waller, of the State Experiment Station, and Harry B. Weiss, chief of the Statistical bureau of the State Department of Agriculture, who conducted the survey. Their study enters very thoroughly into the production-consumption problem, and their findings are based on an interesting schedule of family food budgets, both in city and country.

The federal census figures are quoted giving some idea of the increased food requirements. Farmers had to export much of their production in 1850, with a state population of less than a half-million, but with a present population of more than 3,000,000, the state is compelled to import much more than it exports of perishable food supplies. It was about 1880, when the population passed the million mark, that encroachments of the suburbs started the decline in improved farm land areas; and since that time the decrease has been gradual but steady.

The changing conditions and demands have caused an increase in the state's production of some crops and a falling off of others, but the general tendency has been toward increased production. Poultry has led all other factors in the rising tide of its prosperity. Production of white and sweet potatoes and of tomatoes is on a steady increase. Hay and forage crops also have increased steadily. Corn remains about the same, as does rye, while there is a slight decline in wheat production. Oats and buckwheat have dropped behind.

The fruit industry, after ups and downs, is now increasing its acreage and production, both of apples and peaches. The dairy industry has increased, but butter and cheese production have fallen off because of the active market for fresh raw milk. There has been a slight reduction in swine production and sheep have decreased considerably.

While the future population of New Jersey depends upon many factors, such as birth rates, movement of industries, water supply, sewerage facilities, industrial and suburban movements and migrations, the officials who complied the report say the state has not reached the saturation point, by any means, and declare it is reasonable to assume that for some years to come the rate of increase in population will continue as rapidly as in the immediate past.

Every increase in population improves the markets for New Jersey farmers. In addition, the metropolitan areas of New York City and Philadelphia have a population outside of New Jersey of over 8,000,000 indicating a still larger nearby market. Both cities are centers to which produce growers, far and wide, ship their products, but Jersey farmers have the advantage of shorter hauls and fresher shipments. Good roads and motor trucks also work to the advantage of the New Jersey grower in quickly and economically reaching the metropolitan and home markets.

That the farmer has not fully developed the home market is shown by a report covering the white potato industry. New Jersey farms do not begin to grow the quantity of potatoes needed for consumption of the State's population, yet most of the crop is shipped out of the state, and it is estimated that 10,000,000 bushels have to be imported from other states to supply New Jersey's needs, at a cost in freight charges of at least $2,000,000. Outgoing potato shipments to other states adds at least another $1,000,000 to the freight bill under this peculiar criss-crossing distribution.

Something of the same conditions are found in apple marketing. New Jersey's population, despite the increase in apple production, consumes approximately a half million more bushels of apples than its orchards produce. Yet many apples are shipped out and many shipped in from other states.

The report throws interesting light upon other conditions in the problem of feeding 3,000,000 New Jersey residents. Economists declare its conclusions regarding the opportunity for more direct food distribution, as an advantage not only to the farmer but to the consumer, have set a new target for scientific marketing.

More Milk *now*— more milk for years to come

Too many dairymen judge a dairy feed only by the immediate results produced in the milk pail. It is just as important for you to know what the long time results will be.

Right from the start LARRO lays a sure foundation for consistent heavy milk production by first building up the health and condition of your cows. Continuous feeding of LARRO *maintains* health and condition, thus guaranteeing peak milk production, not only now, but month after month, year in and year out.

Actual figures prove this true in thousands of cases—among grade cows and thoroughbreds alike, regardless of breed, regardless of geography.

Cow No. 241 is an ordinary barn Holstein bought by the Larro Research Farm in 1922 for $125. She had been milking 150 days when she arrived at the farm. Her production during the first 30 days thereafter was 724.5 pounds of milk. In her next lactation, during the corresponding 30 day period, she produced 1,173.3 pounds of milk—more than 50% increase. Her total milk production in the first full lactation period at the Larro Research Farm was 13,646.4 pounds—more than three times the average for all cows in the United States. Larro—maintaining health and condition—plus proper care, did it.

Prince's Rose of Meadowbrook is a Jersey who broke the Pennsylvania state record for 2-year-olds in 1922 with 9,810 pounds of milk and 462.79 pounds fat. In 1923 she again became state champion with a record of 14,292 pounds and 639.05 pounds fat. As a calf she was started on a Larro grain ration and kept continuously on Larro throughout the milking periods mentioned.

Down in Florida, Ferndell, of the famous Lemon City White Belted Herd, produced 13,477.9 pounds of milk and 585.64 pounds of butter fat in her twelfth year—five or six years past the age of peak production for most cows. The herd she leads has been fed Larro for thirteen years and averages 9,998 pounds per year.

A feed that accomplishes such long distance results must be a feed that first builds health and condition—then positively maintains these two important requirements for profitable milk production.

Your cows should be on a grain ration now. There is no feed that will more surely guarantee future production and future profits than Larro.

See the nearest dealer, or write us direct.

THE LARROWE MILLING COMPANY
109 Larrowe Building DETROIT, MICHIGAN

(514)

Larro

The SAFE Ration for Dairy Cows

GARDEN PESTS

Insect pests are very destructive in the home gardens this year. Small bellows hand dusters should be on hand to greet any invasion of plant lice, cucumber beetles or other small insect pests. Prepared nicotine dust, which can be bought in small quantities in air-tight cans, is a great aid in battling some of these pests.

FEDERATION MADE GOOD THEIR PROMISE

At the closing of last year's Feed Pool we asked you for your continued support in business. We take this opportunity of thanking you for giving it to us. We promised you we would improve our shipping service—we have done so. We promised you we would buy earlier—we did buy earlier. We promised you we would make you greater savings—we have made you greater savings. On the basis of the present market prices, our total tonnage of pooled feeds show that we have saved 4000 farmers in the neighborhood of $150,000. This is only a small part of the actual savings we have made farmers by reason of the influences of the low pool prices will have on prices of competing feeds. The success depended upon your loyalty and the credit, therefore, belongs to you.

POOL PRICES	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
P. F. C. F. Milk Makers 24%	$48.05	$48.05	$48.05	$48.55	$49.05	$49.55	$50.05
P. F. C. F. Milk Makers 20%	46.30	46.30	46.30	46.80	47.30	47.80	48.30
Protein Supplement 32%	53.55	53.55	53.55	54.05	54.55	55.05	55.55
P. F. C. F. Laying Mash 20%	49.25	49.25	49.25	49.75	50.25	50.75	51.25

These prices cover freight, car door man's commission and all other charges, to all points taking the Philadelphia rate of freight. Deduct 20 cents per ton for Baltimore, 50 cents for Rochester, $2.30 for Pittsburgh rate points. Add in case your station takes an arbitrary freight rate. Any advance in freight is for buyers account.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.

SILOS

PHILADELPHIA (WOOD STAVE)
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RIGHT PRICE—TERMS—SERVICE
"When You Want a SILO See SCHLICHTER"

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FEED TRUCKS

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MILK FOR HEALTH

There's more milk in the pails and less purchased feed on the farms which are planted with more legume seed.

One small pane of window glass will keep many a smudge off the pages of the cook book.

PREVENT CONSTIPATION

It is dangerous to your health

Constipation is usually caused by wrong food habits and lack of exercise

HOW TO PREVENT AND CURE CONSTIPATION

Eat Laxative Foods

1. Such foods as coarse bread and cereals, vegetables and fruits should be eaten every day.

2. Eat more raw fruits and vegetables. Leafy vegetables and salads of fruit and vegetables are especially good.

3. Buttermilk is more laxative than sweet milk.

4. Avoid rich desserts, candy and pastries.

5. Avoid large amounts of meat.

Drink Water

Drink 6 to 8 glasses of water every day. Drinking 1 to 2 glasses before breakfast and 1 before going to bed is especially helpful. Drinking 1 to 2 cups of hot water before breakfast, followed by 1 or 2 glasses of cold water is an excellent remedy also.

Exercise

Take plenty of exercise daily. Walking is very good. The doctor will show you special exercises to take if necessary.

Practice Good Habits

1. Do not take cathartics or laxative drugs except on the special advice of a physician.

2. Be sure to have a bowel movement every day.

3. Make a habit of going to the toilet the same time every day.

4. Eat meals slowly at regular hours, and chew your food thoroughly.

5. Be cheerful and happy, especially at meals.

Good Laxative Foods

Fresh Fruits

Oranges	Apples with skins
Grapefruit	Pears with skins
Rhubarb	Plums with skins
Peaches	Grapes with skins
Melons	Berries

Eat some fresh fruit every day. It is most effective if taken 15-30 minutes before breakfast.

Dried Fruits

Prunes	Raisins
Figs	Dates

Prunes or figs eaten at bedtime are very helpful.

Leafy Vegetables

Spinach	Lettuce
Cabbage	Swiss Chard
Dandelions	Kale
Romaine	Beet and Turnip Tops

Eat some leafy vegetables every day.

Other Good Vegetables

Celery	String beans
Asparagus	Tomatoes
Onions	Cauliflower
Beets	Corn
Turnips	Potatoes, baked (with skins)
Carrots	

Eat at least one of these vegetables besides potatoes every day.

Coarse Breads

Rye Bread	Bran Bread
Oatmeal Bread	Bran Muffins
Graham Bread	Whole Wheat Bread

Coarse Cereals

Oatmeal	Pettijohn
Cracked Wheat	Ralston
Shredded Wheat	Scotch or Irish Oats

One or two tablespoons of Bran eaten as a cereal or mixed in with the breakfast cereal is a good remedy for constipation, especially for obstinate cases.

Philadelphia Child Health Society
(Formerly The Child Federation)
1506 Locust Street
(Member of Philadelphia Welfare Federation)

MANY FARMERS ASK STATE TO TEST DAIRY HERDS

The interest of Pennsylvania farmers in the tuberculin testing of their cattle continues to pile up. Officials of the Bureau of Animal Industry, Pennsylvania Department of Agriculture, have reported to Secretary Frank P. Willits that the number of cattle tested this year far surpasses similar activities of any previous year. More money has been available for the work, nevertheless the demands by the farmers have increased at a rate that taxes the facilities of the Bureau. Accredited herd tests are proceeding as fast as the State officials can meet the requests.

So far, the statement shows, the Bureau has conducted tests in the following counties: Crawford, Jefferson, Mercer, Warren, Elk, Lawrence, and Butler. During the first six months of this year there were 10,188 herds containing 60,511 cattles tested in seven different counties. This month, said Dr. T. E. Munce, the Bureau's director, the tuberculin tests will be applied to herds in Lawrence, Clearfield, Beaver, and McKean counties.

Applications for additional tests have been received from herd owners in Lawrence, McKean, Clarion, Clearfield, Beaver, Elk, Columbia, Blair, Erie, Westmoreland, Tioga, Centre, Bradford, Monroe, Butler, Union, and Fayette counties. More than 90 per cent of the progressive dairymen in those counties have requested their herds be tested for the disease.

Send for this free Booklet

"A Hundred and One Farm Uses of Concrete"

Wouldn't you like to have more time for yourself? Wouldn't you like to know you were through fixing up fences for once and all? Wouldn't you like to know when you build a hog house that you will never have to repair or rebuild it?

You can be sure of these things when you build with Concrete. Concrete is not only sanitary and economical. It is permanent.

Send today for your free copy of "A Hundred and One Farm Uses of Concrete."

This practical little book has been especially prepared for you and other progressive farmers. It is well illustrated, and contains samples of blue prints which will help you in your building improvements.

It also gives you worthwhile information about Concrete silos, dairy barns, barn floors, feeding floors, hog houses, milk houses and many other forms of Concrete construction.

Finally, it tells you exactly how to make good Concrete; how to proportion and mix the materials, how to get the greatest values out of every sack of cement you buy.

You simply cannot afford to be without this practical little book. And remember, it is free. Write for it today.

PORTLAND CEMENT ASSOCIATION

1315 Walnut St. PHILADELPHIA
347 Madison Avenue NEW YORK
Union Trust Building WASHINGTON, D. C.

A National Organization to Improve and Extend the Uses of Concrete

Offices in 30 Cities

GOOD BREEDING STOCK SHOWS VALUE

In support of increasing evidence that well-bred livestock pays a better return on investment than scrub stock, a Massachusetts dairyman notified the United States Department of Agriculture of his experience. He purchased a purebred heifer bred to an excellent purebred bull of the same breed. The heifer cost $800. He sold the first bull calf for $500, and the second one for $400. The next calf, a heifer sold for $125, and the milk produced by the cow during the 38 months covered by the report, sold for $1,275. The total income thus received totaled $2,100, and the farmer still owns the original animal.

"I think this stock," the farmer states in conclusion, "shows the value of getting good purebred stock for a foundation. Even after making deduction for feed and labor, there is a much larger return than from a grade."

MONTGOMERY COUNTY COW TESTING ASSOCIATION

CARL A. SAGER, TESTER

Due to the warm weather and short pastures along with the busy season, the production for the month of July was considerable less than the previous month.

Cows in milk, 274; cows dry, 42; cows producing over 40 pounds of fat, 26; over 50 pounds of fat, 7; 20 cows produced over 1200 pounds of milk and 43 over 1,000 pounds of milk. Members of the association have started to get rid of the boarder cow. During the month 5 unprofitable cows were disposed of.

The highest cow for butterfat was Pet, a pure bred Jersey of the School of Horticulture, she having produced 1,144 pounds of milk, 57.2 pounds of butterfat with a test of 5 per cent. She is five years old and freshened May 2. The second highest producer for butterfat was Annie, a purebred Holstein owned by A. K. Rothenberger, she having produced 56.07 pounds of butterfat and 1,649 pounds of milk.

Following are the ten highest producing cows in butterfat for the month of July:

Owner	Name & Breed of Cow	Age Years	Lbs. Milk	Lbs. Butterfat
School of Horticulture	Pet, P. B. J.	5	1144	57.20
A. K. Rothenberger	Annie, P. B. H.	6	1649	56.07
W. J. Hendren	Fern Hill, P. B. J.	8	1132	55.47
A. A. Heebner	No. 1, Gr. H.	10	1479	53.24
Mrs. Howard Bieler	Katy, Gr. H.		1262	53.00
J. L. Wood & Sons	Lily, P. B. H.	6	1203	52.93
A. A. Heebner	No. 11, Gr. H.	4	1535	52.19
Ursinus College	K. D. K. P., P. B. J.	5	1572	48.73
W. J. Hendren	B. Dolly, P. B. J.	12	918	47.73
Mrs. Howard Bieler	Susie, P. B. H.	4	1302	46.87

The following herds had the highest milk production:

Name	Cows Milking	Average Lbs. Milk
Ursinus College	12	979
A. A. Heebner	14	923
Mrs. Howard Bieler	11	914
J. L. Wood & Sons	13	905

The following herds had the highest average butterfat production:

Name	Cows Milking	Average Lbs. Fat
O. M. Woodward & Son	9	34.2
Ursinus College	12	32.2
Mrs. Howard Bieler	11	32.
A. A. Heebner	14	31.6

The following herds had the highest average test:

Name	Average Test
W. J. Hendren	5.63
J. Alan Middleton	4.8
School of Horticulture	4.79
C. William Haywood	4.7
Vincent Alderfer	4.34

The highest testing cow for the month was a registered Jersey owned by W. J. Hendren; her test being 6.8.

FAMOUS COW DONATED FOR SCIENTIFIC STUDY

Sentiment prevented the famous cow, Sophie Nineteenth, of Hood Farm, from being sold at auction and falling into unfeeling hands when the herd of which she was a member was dispersed a year ago in April. Her owner, Mrs. C. I. Hood of Lowell, Mass., preferred instead to let this world's champion Jersey cow continue to add to the world's good through her contribution to scientific research, and, accordingly, donated her to the United States Department of Agriculture. Her career as an active producer of dairy products had ceased.

She arrived at the department experimental farm on May 13; and on June 19 she was chloroformed and prepared for study. Outward measurements were made of her body while she was still alive; and afterward the size and weight of her various internal organs were secured. Her wonderful record in production of milk and butterfat over so long a period of time makes the data secured from her an especially valuable contribution to the study that is being made by the Bureau of Dairying of the relation between conformation of dairy cattle and their producing ability. Her skeleton will be prepared and mounted by an expert from the Smithsonian Institution and will be used for study purposes in the laboratory of the Bureau of Dairying.

Sophie Nineteenth held the world's record for butterfat production in the Jersey breed from January, 1914, to November, 1918, with a production of 17,557 pounds of milk and 999 pounds of butterfat in a year. During 11 lactation periods she produced over 7,500 pounds of butterfat. This is the long-time production record for all breeds.

COOPERATIVE POOL REPORT

On August 2nd, the Pennsylvania Farmers Co-operative Federation closed its 1924 Feed Pool with the largest tonnage ever sold. The Pool Feeds were sold to more than 4000 dairymen in the 32 counties and will be distributed in more than 148 communities in Pennsylvania.

Owing to the unsettled market conditions and selling without a price, sales were retarded somewhat during the early part of the canvas. This was, however, offset in a great measure by the good satisfaction the feed was reported to have given.

More than 148 carloads of Pool Feed will be shipped during the first half of September. Shipments, it is planned, will continue to be made monthly throughout the winter, making in all 7 monthly shipments to each community.

The maximum pool prices which the farmers will pay will not be above $48.05 per ton for 24% Milk Maker and $46.30 per ton for 20% Milk Maker. Philadelphia freight basis for all deliveries up until December 1st. After that date storage charges of 50 cents a ton per month will be added.

An increased tonnage of feed this year over last year can, it is stated, be accounted for, first, that the Pool Selling Plan of centralized purchasing reduces the cost of doing business and increased efficiency, and second, the extreme high quality of the feed together with the good satisfaction given the feeder.

On account of the feed pool being started too late last year and the price being higher than some dairyman expected, some fault was found with the pool. This dissatisfaction has more than overcome, it is said, by the high quality of the feed.

Due to delayed shipments more than the high price, some trouble was found last season in Chester and Delaware Counties. At several points in those sections the tonnage is even larger this year than in 1923. The Federation credits this increased tonnage to the fact that the feeds were of good quality.

What Every Farmer Knows

That the most complete display of implements

The largest array of thoroughbred livestock

The largest exhibition of poultry

and

The most attractive premiums are

A Few of the Features

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1924

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Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

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are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

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REG. GUERNSEY BULLS
8 to 18 months old. From A. R. Dams. Best of breeding. Accredited herd.
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Second Hand De Laval Milker in Good Condition
JEMORA FARM
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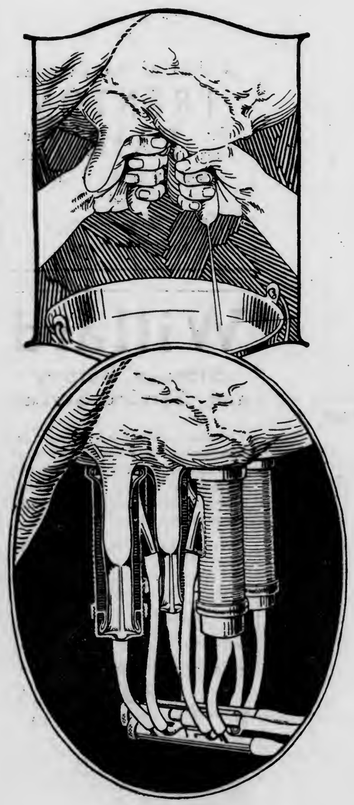

A user of a De Laval Milker recently said: "I would no more attempt to milk cows without a De Laval than I would try to raise wheat without a binder."

You know that hand labor can't compete with machinery—and yet there is no machine a dairyman can own that will save so much time as a De Laval Milker. Figure up what cutting your milking time in two, twice a day every day in the year, amounts to; and then compare this with the time any other machine you own will save.

But this is just one reason for using a De Laval Milker. It milks cows in the way they like best—vigorously, yet with a gentle, soothing and uniform action which stimulates the milk-forming organs to greatest production. That's why De Laval users are practically unanimous in their statements that they get more milk with it than by hand milking.

But that isn't all; with the De Laval cleaner milk can also be produced—and cleaner milk is worth more money.

There are thousands of De Laval Milkers in use which are giving perfect satisfaction. Many users state they would sell their cows and go out of the business if they couldn't have a De Laval.

If you are milking ten or more cows by hand you are losing enough to pay for a De Laval. Send for complete information.

The De Laval Separator Company

NEW YORK	CHICAGO	SAN FRANCISCO
165 Broadway	29 E. Madison Street	61 Beale Street

Sooner or later you will use a

De Laval

Milker and Cream Separator

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE

VOLUME V WEST CHESTER, PA., AND PHILADELPHIA NUMBER 6

NATIONAL DAIRY EXPOSITION

AN OUTSTANDING DEMONSTRATION OF THE DAIRY INDUSTRY

Features and facts relating to every phase of the dairy industry were aptly portrayed to the Eighth Annaul Show of the National Dairy Exposition, held in Milwaukee, Wisconsin, September 27th to October 4th.

The mammoth state fair grounds just outside that city were used for the vast cattle exhibit, the production features and publicity programs identified with the industry, while the distribution display was housed in the Auditorium Building in the city of Milwaukee.

At these two wonderful exhibits the educational value of the dairy industry was largely stressed. The exhibits on the whole were of wonderful educational value and no one—be he farmer, manufacturer, distributor as well as the public, could fail to be impressed with what he saw and heard.

The educational value of publicity was portrayed by the several agencies engaged in that class of work, so that the consumer visitor was not only impressed with the vast mechanical exhibits of machinery for production and distribution purposes but also had an opportunity to see the force of the dairy program as portrayed by the educational and publicity units.

LIVE STOCK EXHIBITS

Over one thousand pure bred cattle from almost every section of the United States, together with an outstanding number of herds from the Dominion of Canada were exhibited.

There was a splendid exhibit of cows featuring the different dairy breeds, as well as comprehensive exhibits of grade cows, particularly in connection with cow testing work. Boys' and girls' calf club exhibits were especially interesting.

Full details as to awards for championships were not available and will therefore have to be omitted in this article.

The American Jersey Cattle Club presented a graphic display of cows, featuring proper feeding. The economic value of the breed was set forth in detail. Twenty-four cows, from average Wisconsin farms, were used in this demonstration. The production records as to milk output, fat production and particularly feeding and other costs, etc., were conducted just as they would have been down on the farm and these records were displayed behind each cow. The tests were conducted under the direction of the Department of Agriculture of the University of Wisconsin.

The American Guernsey Cattle Club showed a very interesting "Get of Dam" demonstrator of the breed. These cows were all descendants of Glenwoods Miss Greta 29218 and 24 direct descendants of milking age. The cows were, we understand, the property of L. B. Stevens of Oconomowac, Wisconsin, and splendidly illustrated the value of the breed.

A splendid display of the Holstein breed was headed by Carnation Segis Prospect. Eleven and a half years old, weight 1775 pounds, with an average production of 48 quarts, or over 100 lbs. of milk per day for 365 days, together with an outstanding line of high record cows. She is a beautiful animal as well as a great producer.

Among other features was a display of Toggenberg goats, which are used for the production of milk for consumption in and around Milwaukee. There appears to be good demand for goats' milk in that locality—the price being 40 cents per quart.

GUERNSEY HERD OF HARRY WHITNEY, NEAR KENNETT SQUARE, PA.—An Outstanding Group of Animals

UNITED STATES DEPARTMENT OF AGRICULTURE EXHIBIT

The exhibit of the United States Department of Agriculture was most instructive and of particular value and interest to the dairy farmer.

The value of the dairy industry was shown in graphic form. Exhibits were grouped under the following heads, each being illustrated with accompanying statistics.

1. Need for Culling Cows.
2. Better Milk—Better Income .
3. Average Use Lower than Other countries.
4. Cow Testing Associations.
5. Better Bulls.
6. Value of Pure Breds.
7. Underfeeding is Uneconomical.
8. Lime in Dairy Feeds.
9. Pastures Reduce Feeding Costs.
10. Care of Calves.
11. Care of Dairy Bull.
12. Farm Operations.
13. 14. 15. The Development of Dairying, Embracing Primitive, Improved and Further Improvement Stages.
16. How to Produce Clean Milk.
17. The Cream Line.
18. Dairy By-Products.
19. Sweet Cream Butter.
20. Market Information.
21. Economics of Marketing.
22. World's Dairy Industry.
23. Extent of Dairy Industry.
24. Trend of Business.
Co-operative Marketing.

The production of dairy products, involving the manufacture of milk powder, whey products, casien, casien glue, buttermilk products were also portrayed.

Statistics were also shown, showing that enough milk is produced in the United States per year to allow for each man woman and child the use per year of 212 quarts of whole milk, 2.6 gallons of ice cream, 17 pounds of butter, 3.9 pounds of cheese, 13.6 pounds of condensed and evaporated milk, together with a large amount for miscellaneous products.

DEALERS' EXHIBITION

This exhibit was not only the most elaborate in detail but was larger and more general than those held at most previous exhibits.

The show, which was held in the Auditorium Building embraced every angle and phase of milk distribution. It was well presented and well organized and was of great educational and practical value and no doubt was greatly enjoyed and appreciated by all who visited it.

Machinery manufacturers and dealers present were more than gratified with the actual sales and valuable contacts that were made. From the standpoint of the machinery men, they said this show marked a great step forward.

An interesting feature exhibit was that showing the wide range of truck shipments of fluid milk.

The Harmony Creamery Company, of Pittsburgh, Pa., showed the adaptability of the glass lined truck for long distance hauling.

One such truck carrying 5400 quarts of pasteurized milk came direct from Pittsburgh to Milwaukee, a distance of 550 miles, in 63 hours (61 hours in actual transit.) This shipment left Pittsburgh with the milk at a temperature of 36 degrees, arriving at Milwaukee with a temperature of 41 degrees.

The milk was distributed free to the public. On the second day after its arrival the thermometer showed that the temperature had risen to only 46 degrees.

THE NATIONAL DAIRY COUNCIL EXHIBIT

The National Dairy Council had an elaborate and comprehensive display at its activities at the National Dairy Exposition in Milwaukee. This exhibit covered every phase of the work from production to the development of material designed to increase consumption. The exhibit consisted of two lines of booths covering a space 200 x 40 feet. The center of each booth was a mechanical exhibit particularly applicable to the type of material in the booth. These mechanical exhibits proved to be a great attraction.

The contents of the different booths were as follows: The quality control work. This contained examples of sediment tests, Methylin blue tests and various types of instruments used. A quality control man was on duty all the time to explain the work to those interested, statistics were given and statements as to the activities of the department and the field covered, and also farm crop values.

Food pacts for grown-ups was the subject covered by one of the booths. This included recipe books, menu cards and

(Continued on page 7)

OUTLOOK FOR THE DAIRYMAN

COMPREHENSIVE REVIEW OF THE WESTERN SITUATION

BLUE VALLEY CREAMERY INSTITUTE

Milking cows will continue to pay dairymen good profits for several years to come, in spite of the tremendous increased production since 1920, is the statement made today by the Blue Valley Creamery Institute, which has just completed a survey of dairy consumption and production figures.

A study of the factors that have stimulated the industry indicates that gains in production will not continue as rapidly as in the past four years. Production will not increase more than the growth of the consuming population. This will mean a fair return for dairy products, though the margin in feed costs may be somewhat smaller.

The low level of grain prices since 1921 and the efforts to diversify agriculture in the grain states, as well as in the beef producing sections, have resulted in a significant increase in dairying. In 1923, gross milk production in the United States showed an increase of 21 per cent. over 1920. Even on a per capita basis the output was 15 per cent. larger than four years ago.

The total last year was sufficient to furnish 52 gallons of milk for household use, 17 pounds of butter, 3.9 pounds of cheese, 13.25 pounds of condensed and evaporated milk and 2.66 gallons of ice cream for every man, woman and child in the United States.

Preliminary estimates indicate a further gain in per capita output in 1924. This may represent a peak year in the industry, however, as producers do not find present price relationships as profitable as they were.

Wholesale prices of butter are 6 cents lower than they were a year ago while cheese is nearly 5 cents a pound cheaper. The country-wide price paid to producers of fluid milk in August was 6 per cent. lower than a year ago.

At the same time, corn prices are 38 per cent. higher than a year ago, oats 30 per cent higher, and bran 18 per cent. higher.

In the long run, such changes in price will make those now engaged in other lines of farming less anxious to launch into the dairy business and may tend to check production in herds already established. This appears particularly true since a substantial share of the increase in output since 1920 was due to larger production per cow resulting from more liberal feeding on low priced grains and from better care. The number of milk cows added to the national dairy herd was not much greater than the average long time rate of increase.

Lower prices for dairy products will stimulate closer culling of herds in order to eliminate cows which could produce profitably at a higher level of prices, but which would show a loss under present prices for feeds and dairy products. Also, it will reduce competition from foreign dairy products in the domestic market. Last year the United States was a net importer of dairy products. In the next twelve months the import balance promises to be considerably smaller and it may be actually replaced by an export balance.

It takes time for such readjustments to be made and it is possible that the momentum coming from the stimulation in the last three years will carry on into the next year, in spite of less favorable ratios between prices of feeds and dairy products. A survey by the United States Department of Agriculture showed that there were 24.6 per cent. as many heifers between one and two years of age on farms on June 1, 1924, as there were dairy cows in milk. This is more than a replacement percentage and as these dairy heifers come into milk they will tend to sustain production.

The immediate outlook for prices of dairy products is dominated by seasonal conditions. The seasonal decrease in the milk flow is showing up so that the output of dairy products is gradually declining from week to week. Cool weather and ample rains have helped to sustain production in the middle west, particularly in the butter and cheese producing states, while dry weather in some of the principal fluid milk districts in the east and also west of the continental divide are offsetting some of the increase in the middle west. For the country as a whole, however, production is large and the heavy output during July and August has resulted in the accumulation of enormous stocks of butter, cheese and condensed milk in storage. Fortunately, much of this increase in production has been at low cost as a result of good pastures so that returns to the dairyman have been as attractive as from higher prices with bare pastures and light productions.

RURAL ELECTRICFICATION IN EUROPE

When we want a thing that seems hard to get it is always encouraging to find that people elsewhere have succeeded. If they have done it we can too. So in working out the problems of rural electrification in Pennsylvania it is a help to know what has been done in other states and countries.

WHAT THEY ARE DOING IN BAVARIA

Take for example South Germany. Last summer a representative of the Giant Power Survey Board travelled through Bavaria investigating rural electrification, he found a net work of electric wires over the cultivated areas. The homes and farm buildings were electrically lighted and portable electric motors were generally found on every well run farm.

ELECTRIC PLOUGHS ARE BEING DEVELOPED

Electric power is being used on the farms in Germany not only to run saws, feed grinders, and other power machinery about the barns, but it is also being adapted for field equipment such as ploughs. A number of experiments of this sort are being tried, from which very promising results are expected.

CROPS ARE DRIED BY ELECTRICITY

Instead of worrying about the weather in harvest time and wondering whether his crops are going to rot if he cuts them today the Bavarian farmer harvests when he pleases and dries his hay or clover in an electric dryer. In one night this machine dries the crop, and it is claimed that the hay is better than sun-cured crops because in the process of sun drying some of the most valuable food properties are lost.

HOW HAS THIS DEVELOPMENT BEEN POSSIBLE

The highly developed state of farm electrification in Bavaria can be mainly attributed to two factors:

1. The interest the power companies have taken in promoting rural electrification;

2. The active interest of the farmer himself.

It's the same old story, "Where there's a will there's a way." The way it has been worked out in Bavaria is through farmers co-operative organizations. The co-operative builds and maintains the distribution lines to the farms. The group buys the electric energy wholesale from the power company at the nearest terminal of its transmission system. The company thus has only one meter to read and only one bill to send out. From the power company's meter the co-operative distributes the current to each farm and the members divide the cost on the basis of their individual meter readings. Owing to the fact that it is a co-operative group the farmers allow lines to be run across their farms from house to house as they would not care to do if the power company tried to build them in this way. The co-operative spirit also perhaps makes them less critical if the service is not always perfect. At all events they have been able to get electric light and power at very low rates compared with the costs where the power company owns and operates the distribution system and bills direct to the individual farmer. And low rates and extensive use of electricity always go hand in hand.

TO DETERMINE USES OF ELECTRICITY ON FARMS

State College Men to Investigate For Giant Power Survey

A task that is expected to prove of great value to farmers of Pennsylvania, the determination of all possible uses of electricity on the farm, is to be undertaken during the next few months by faculty members of the Pennsylvania State College in co-operation with the State Department of Agriculture.

The "giant power survey" project of the state administration has brought out the need for information on "the uses of electricity on farms and in farm homes." The best way to get this information, according to President John M. Thomas, of the Pennsylvania State College, who is chairman of an advisory committee, is to conduct actual tests on the farm. Professor R. U. Blasingame, head of the college farm machinery department, has been appointed chief investigator and will start his experiments at once.

According to Prof. Blasingame, the present ordinary uses for electricity on the farm are limited to lighting of the house and barn, cooking and washing and sometimes the operation of milking machines. Most farmers who have electric current available use it only for lighting. Power companies get very low returns for installing lines for such limited service, and one of the purposes of the investigation is to determine whether or not the farmer is justified in taking steps to make electricity do more of his work.

"As soon as the farmer gets in a position to use enough electricity to pay the power companies to put in lines, he will get the current," says Prof. Blasingame. By the use of portable electric motors he feels that farmers should be able to use electric current for feed grinding, silo filling, threshing, wood sawing, fodder shredding and corn husking, baling, operating separtors, graders, machine repair shop tools and various other uses which he will determine by actual test.

The advisory committee of which President Thomas is chairman, also includes J. M. McKee, deputy secretary of agriculture, Dr. R. L. Watts, dean of the agricultural school at State College, and C. L. Kinsloe, head of the college department of electrical engineering.

WISCONSIN COW TESTING ASSOCIATION FACTS

AN INTERESTING REVIEW OF CONDITIONS

Wisconsin has 168 Cow Testing Associations with 76,100 cows on test. These are owned by 4,471 members. The average association has 27 herds and 453 cows and an average of 17 cows to the herd. Fifty out of the 71 counties in the state now have one or more associations. Clark County leads the list with ten associations.

Since the first cow testing association was started by the Wisconsin Dairymen's Association in 1906, over 500,000 cows have been placed on yearly test for 33,000 farmers in 1,143 regularly organized cow testing associations.

PRODUCTION OF COWS

There were 100 associations reporting on the year's production. More than 49,000 cows in 2,943 herds averaged 7,106 pounds milk, 3.84 per cent. fat, and 273.2 pounds of butterfat. The average cow the country over is credited with 160 pounds fat and the average Wisconsin cow with 190 pounds fat.

Eighteen associations report an average yearly production per cow of 300 pounds fat, the Richfield association with 350 cows heading the list with an average of 9,849 pounds milk containing 341 pounds fat.

There were 535 herds in 61 associations reported with an average of over 300 pounds fat a year; or 18 per cent. of all herds.

Twenty-five associations report one or more herds with a yearly herd average of over 400 pounds fat, the purebred Holstein herd of Leo Kuhl and Son of the Hazel Green Association heads the list with an average of 15,118 pounds milk containing 534.5 pounds fat for 13 cows.

There were 4,185 cows in 105 associations reported with more than 365 pounds fat, seventeen associations reporting one or more cows with records in excess of 600 pounds fat.

The highest producing cow for the year was found in the Kuhl herd. She is a purebred Holstein with a record of 22,914 pounds of milk, 3.66 per cent. test, with 839 pounds fat.

GOOD BULLS ARE USED

There were 19 grade or scrub bulls reported in use or .48 per cent. of the 3,929 bulls in service. The estimate of the State is 60 per cent. scrub bulls. Holstein bulls head 2,310 cow testing association herds, or 63 per cent. of the 3,739 purebred bulls. Guernseys are second with 997 and Jerseys third with 195. During the year, 148 purebred bulls replaced grade bulls. A total of 815 purebred bulls were purchased by association members last year. There were 72 associations that reported no grade or scrub bulls in use.

10 PER CENT OF COWS GO TO BUTCHER

Last year 5,542 cows were sold to the butcher as unprofitable, or 10%. There were 3,714 cows sold for dairy purposes, and 882 pure bred bulls were sold on the basis of the cow testing association records of their dams. Advanced Registry testing is done by 98 members in 68 associations.

During the year 1,710 herds out of 3,429 were tested for tuberculosis, 1,325 of which showed no reaction. There were 1,304 cow testing association herds on the State and Federal accredited list as free of T. B. or 39% of the 3,375 herds on which a report was made.

COWS ARE WELL FED

Cows on pasture were fed grain in 1,310 herds and silage in 732 herds. There were 2,363 members who grew alfalfa as compared with 776 who grew timothy hay. Soybeans for hay was grown by 552 and for grain by 152. Commercial mixed feed was purchased by 1,482 members with 832 buying feed co-operatively at an estimated saving of $15,328.00. Grain was fed to dry cows by 2,190 members, or 60% of those reporting.

ACTIVITIES OF TESTERS

Testers in 51 associations made 176 retests on high cows. In 30 associations 970 soil samples were tested. There were 54 testers who helped organize calf clubs.

Testers made 6,393 skim milk tests, finding 388 faulty cream separators. Forty-nine testers published a printed annual report of their work, 88 helped reorganize their associations, and 104 helped in the sale of surplus cattle.

FARM CONVENIENCES

The following equipment was found on 4,000 farms of members:

3,743 members owned 4,591 silos, 1,856 had milk houses, 552 had ice houses.

There were 1,884 whitewashed barns, 1,007 milking machines, 2,600 had drinking cup systems, 2,775 had steel stalls, 1,191 had electric lights, 3,723 had autos, 675 trucks, and 1,289 tractors.

ANNUAL MEETING

INTER-STATE MILK PRODUCERS' ASSOCIATION

December 1 and 2, 1924

During the next month every local organization of the Inter-State Milk Producers Association should hold meetings for the purpose of electing delegates to attend the annual meeting of the Association, to be held at the Adelphia Hotel, Philadelphia, Pa., Monday and Tuesday, December 1st and 2nd.

These annual meetings are the members' own meetings. Reports of the Association's activities will be presented by its officers. Policies and programs to be carried out during the next year will be presented, discussed and acted upon.

Every member, either in person or through its accredited delegates, should be represented at this annual gathering of its membership.

The first day's session will be confined to members of the Association only. The second day's session will be open to the public.

The annual election of directors to serve for three years each will be held on the morning of December 1st. Eight directors are to be chosen.

Every member of the Association has a right to vote, either in person or by proxy.

A formal proxy is attached below. If you cannot come personally, fill out this proxy and give it to your delegate or some other member who will attend the meeting who can represent you and cast your ballot.

In addition to this ballot additional blank ballots may be obtained from your local secretary. Ballots will also be supplied upon direct application to the office of the Association.

The second day's session of the Association will also be held at the Adelphia Hotel. This will involve general business discussions and addresses by prominent speakers.

The annual banquet will be held at the Adelphia Hotel, Monday evening, December 1st. The banquet will be open to members of the Association, their friends and others. The number of persons who will be able to be accommodated will be limited to 500—that being the capacity of the banquet room. Send for your tickets early. No tickets will be sold after that number have been taken.

An elaborate program has been prepared. Prominent speakers will make short addresses. A new Philadelphia Inter-State Dairy Council play will be presented.

Remember, this is the members' own annual meeting. Make it a point to attend or see to it that your delegate or some other member holds your proxy and can represent you at the annual election.

PROXY FOR STOCKHOLDERS

INTER-STATE MILK PRODUCERS' ASSOCIATION

INCORPORATED 1917

REGISTERED WITH

CORPORATION TRUST COMPANY OF AMERICA

WILMINGTON, DELAWARE

PROXY

STOCKHOLDERS' MEETING

Know All Men by These Presents,

That I, the undersigned, being the owner of shares of the capital stock of the corporation above named, do hereby constitute and appoint my true and lawful attorney in my name, place and stead, as my proxy, at the annual meeting of the stockholders of the said corporation to be held in the Adelphia Hotel, 13th and Chestnut Sts., Philadelphia, Pennsylvania, on the First day of December, 1924, and on such other day as the meeting may be thereafter held by adjournment or otherwise, according to the number of votes I am now or may then be entitled to cast, hereby granting the said attorney full power and authority to act for me and in my name at the said meeting or meetings, in voting for directors of the said corporation or otherwise, and in the transaction of such other business as may come before the meeting, as fully as I could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that my said attorney or substitute may do in my place, name and stead.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this day of , 1924.

Witness:.....(Seal) .....(Seal)

ENCLOSE 10 CENTS IN STAMPS WITH PROXY FOR REVENUE TAX

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Editorial

The annual meeting of the stockholders of the Inter-State Milk Producers Association is rapidly approaching.

This meeting should fully represent the membership at large, either directly or through proxies held by other members of their selection.

The various policies and programs of your Association will be discussed at length. New plans and programs considered. The term of office of eight directors expire.

This is the one meeting when the voice and opinions of the membership at large can be expressed.

It is the duty of every local of the Association to be represented, either in person or by proxy.

Perfect co-operation of all the members of the Association spells success for all.

Let every member enter the basic months of the year with a definite purpose in view in planning for his production for the next twelve months.

To increase production, just for the sake of production alone, having in view nothing more than the establishment of a greatly enlarged and abnormal basic quantity is not good business—it is not a sound, economic policy at this or any other time.

Remember that we are in a period of decreased consumption with uncertain prospects for the future. Consumers have curtailed in the purchase of very many kinds of foods, milk included, because of decreased employment of labor.

Remember that butter production has increased by leaps and bounds. That the butter market is in a serious condition and that even with greater buying now, butter prices may drop sharply. And remember further that any marked reduction in butter prices may seriously affect the prices of fluid milk.

A continuation of a normal basic supply of milk will better enable the Association to hold milk at its present price level. Large basic quantities may break the market.

The prompt elimination of the boarder cow is sound economics. It's good business. Do not fail to keep up this practice. The additon of cows to the herd, particularly in view of high feed costs and theatening market conditions is not a sound business policy.

There is danger, as usual, that the cows offered for sale at this time are the "discards" of other dairymen who have weeded them out.

Calm thinking and calm planning will carry us over the danger period.

BASIC MILK ONLY

October—November—December

Under the Philadelphia Selling Plan, all milk sold for fluid consumption to co-operating milk dealers, by members of the Inter State Milk Producers' Association will be classed as Basic Milk.

No surplus, either as first or second class, except under special arrangements, will apply during October, November, and December.

During these three months, shipments of milk, under the Philadelphia Selling Plan will establish the basic quantities of each producer of basic supplies for 1925. The average quantity of milk shipped by producers in October, November and December, will represent the average monthly basic quantity, in pounds or quarts. On this average quantity buyers co-operating with the association, will pay the established basic quantity price during 1925.

All milk shipped during October, November and December, will be paid for as basic milk, subject however to market conditions.

The same rules and regulations as have applied this year will continue in general effect. (See page 10 for detailed statement as to basic quantity regulations.)

NEW DAIRY SPECIALIST ON PENN STATE STAFF

The dairy department of the Pennsylvania State College has announced the appointment of C. D. Dahle, of Minnesota, as associate professor of dairy manufacture to take the place vacated by W. B. Combs who resigned to become head of the dairy manufacturing department at the University of Minnesota.

Dahle comes to Pennsylvania well trained in every branch of the dairy industry. He was graduated from the University of Minnesota in 1920 and received his master's degree the following year. Since then, he has been employed in teaching and research work at the same institution and has completed several outstanding research projects in dairy manufacturing.

With the resignation of Professor Combs, who has been head of the dairy manufacturing division at Penn State for several years. W. H. Martin takes charge of the dairy manufacturing work at the college. Martin has been with the department for five years and has a thorough understanding of the problems of the dairy manufacturing industry in Pennsylvania.

MARKET CONDITIONS

The fluid milk markets not only in the Philadelphia Milk Shed but in nearly every large producing district in the United States, appears to be flooded with milk.

The butter situation throughout the country is in a critical stage. Production has greatly exceeded consumption and very large quantities are in storage. Butter prices have been weak and the situation is dangerous.

Any large increase in milk production in this territory will have a depressing effect on prices and may force a reduction.

Caution on the part of the farmer may avert possible declines in prices. If the customary production basis at this season of the year is not increased there is a possibility that present price levels may be maintained.

Costs of feeds are high and production costs will necessarily be greater.

The business situation appears largely to be the cause of the lower consumption of fluid milk. This appears to apply generally and is particularly true in this market, where unemployment on the part of common labor is very heavy.

The Eighth Annual Meeting

INTER-STATE MILK PRODUCERS' ASSN.

December 1st and 2nd 1924

ADELPHIA HOTEL
Philadelphia

Election of Directors

Important Business Program

Annual Banquet
Monday, December 1st

Complete Details in November "Milk Producers' Review"

Make Your Plans to Attend These Big Meetings

WORLD'S CHAMPION FOR REPRODUCTION DEAD

Word has been received that Financial King's Interest 235065, the pure-bred Jersey that holds the world's record for reproduction, all breeds, died at the Greystone Jersey Farm, Pennsylvania, on August 6th, at the age of twenty-four years and seven months.

This marks the close of one of the most notable careers that is to be found in livestock history, for during her lifetime Financial King's Interest was the mother of twenty heifer calves and one bull calf. Unfortunately she was not tested until she was in her nineteenth year, but even at that great age she produced, with calf, 401.09 pounds of butter-fat, and followed this with another official test in her twentieth year, when she again produced over 400 pounds of butter-fat.

At the 1923 National Dairy Show she was exhibited with ten other of the greatest Jerseys that have ever been gathered together, and was the center of a great deal of interest.

THE NATIONAL FEDERATION OF CO-OPERATIVE MILK PRODUCERS

The directors of the National Co-operative Milk Producers' Federation held a meeting at Milwaukee, Wisconsin, on September 28th, in connection with the meeting of the National Dairy Show.

The meeting was held at the Republican Hotel and was well attended. John D. Miller, president, presided.

The Minnesota Creamerymen's Association was elected to membership and John Brandt, of that organization, was elected to the Board of Directors of the Federation.

The eighth annual meeting of the organization, it was decided, would be held in Detroit, Michigan, on Friday and Saturday, November 14th and 15th. Due notice of the meeting will be announced at a later date.

The various matters under discussion may be grouped under the following heads.

1. Policy as to various tariff regulations.
2. Annual meeting at Detroit.
3. Temple of Agriculture Campaign.
4. Congressional Legislation.
5. Reports of International Institute of Co-operation.

These various problems were discussed at length.

Delegates to the American Dairy Federation were named as follows: John D. Miller, president; C. E. Huff, F. P. Willits, John Brandt and C. Bechtelheimer.

A special committee, composed of Harry Hartke, G. R. Rice and H. D. Allebach, was appointed to present plans at the coming annual meeting for the Temple of Agriculture Campaign.

FEW TB REACTORS FOUND IN CLEARFIELD TESTS

Among the 4,500 head of cattle tested in 10 townships of Clearfield County, Pennsylvania, only 18 reactors were found. This exceedingly small number of reactors indicates two things according to Dr. Bruner, of the State Bureau of Animal Industry; First, the original cattle in the county were not infected with tuberculosis; Second, the farmers in that area have been selling rather than buying cattle from outside the county so that the disease was not introduced from other areas. Even though the number of reactors was small, the eradiction work proved invaluable since it eliminated possible spread of the disease from the few infected animals to many others throughout the county.

Statement of the ownership, management, circulation, etc., required by the Act of August 24, 1912, of Inter-State Milk Producers Review, published monthly at West Chester, Pa.

Editor, August A. Miller, Brookline, Delaware county, Pa.; Managing Editor, F. P. Willits, Ward, Pa., Delaware county; Business Manager, August A. Miller, Brookline, Delaware county, Pa.; Publisher, Inter-State Milk Producers Association, Philadelphia, Pa.

Owners: (If a corporation, give its name and the names and addresses of stockholders holding 1 per cent. or more of total amount of stock. If not a corporation, give names and addresses of individual owners). Inter-State Milk Producers Association, H. D. Allebach, Trappe, Pa.; F. P. Willits, Ward, Pa.; F. Shangle, Trenton, N. J.; A. B. Waddington, Woodstown, N. J.; E. Nelson James, Rising Sun, Md.; R. W. Balderston, Media, Pa., and 19,880 others.

Known bond holders, mortgagees and other security holders, holding 1 per cent. or more of total amount of bonds, mortgages, or other securities: (If there are none, so state.) None.

Average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above. (This information is required from daily newspapers only.)

AUGUST A. MILLER

Sworn to and subscribed before me this 25th day of September, 1924.

W. H. Henderson
Notary Public
My commission expires March 27, 1927.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions under the Philadelphia Selling Plan again became effective with January, 1924. The same provisions will apply for next year. The basic quantity of all producers operating under this plan will be made during October, November and December. This average basic quantity will represent the basic quantities of respective producers during 1925.

All milk shipped during these three months will be paid for at the basic price.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

SEPTEMBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

SEPTEMBER SURPLUS PRICE
F. O. B. Philadelphia

Test per cent	per 100 lbs.	per qt.
3.	$1.97	4.2
3.05	1.99	4.25
3.1	2.01	4.3
3.15	2.03	4.35
3.2	2.05	4.4
3.25	2.07	4.45
3.3	2.09	4.5
3.35	2.11	4.5
3.4	2.13	4.55
3.45	2.15	4.6
3.5	2.17	4.65
3.55	2.19	4.7
3.6	2.21	4.75
3.65	2.23	4.75
3.7	2.25	4.8
3.75	2.27	4.85
3.8	2.29	4.9
3.85	2.31	4.95
3.9	2.33	5.
3.95	2.35	5.05
4.	2.37	5.1
4.05	2.39	5.1
4.1	2.41	5.15
4.15	2.43	5.2
4.2	2.45	5.25
4.25	2.47	5.3
4.3	2.49	5.35
4.35	2.51	5.4
4.4	2.53	5.4
4.45	2.55	5.45
4.5	2.57	5.5
4.55	2.59	5.55
4.6	2.61	5.6
4.65	2.63	5.65
4.7	2.65	5.7
4.75	2.67	5.7
4.8	2.69	5.75
4.85	2.71	5.8
4.9	2.73	5.85
4.95	2.75	5.9
5.	2.77	5.95

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37

SEPTEMBER BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity 3% Milk

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

SEPTEMBER SURPLUS PRICE
Country Receiving Stations

Test	per 100 lbs.	Test	per 100 lbs.
3.	$1.39	4.	$179
3.05	1.41	4.05	1.81
3.1	1.43	4.1	1.83
3.15	1.45	4.15	1.85
3.2	1.47	4.2	1.87
3.25	1.49	4.25	1.89
3.3	1.51	4.3	1.91
3.35	1.53	4.35	1.93
3.4	1.55	4.4	1.95
3.45	1.57	4.45	1.97
3.5	1.59	4.5	1.99
3.55	1.61	4.55	2.01
3.6	1.63	4.6	2.03
3.65	1.65	4.65	2.05
3.7	1.67	4.7	2.07
3.75	1.69	4.75	2.09
3.8	1.71	4.8	2.11
3.85	1.73	4.85	2.13
3.9	1.75	4.9	2.15
3.95	1.77	4.95	2.17
		5.	2.19

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations

1924	Average per month Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51
June	1.95	1.62
July	1.91	——
August	1.81	——
September	1.79	——

SEPTEMBER BUTTER PRICES

	92 Score Phila.	Solid Packed New York	Chicago
2	39 1/2	38 1/4	37
3	39 1/2	38 1/2	37 1/4
4	39 1/2	38 1/2	37 1/4
5	38 3/4	37 3/4	37 1/4
6	38 3/4	37 3/4	37
8	38 3/4	37 3/4	37
9	39	38	37 1/4
10	39	38 1/4	37 1/2
11	40	39	37 1/2
12	40	39	37 3/4
13	40	38	37
15	39	38	37 1/2
16	38 1/2	37 3/4	37 1/2
17	38 1/2	37 1/4	37 1/2
18	38 1/4	37 1/4	37
19	38 1/2	37 1/2	37
20	38 1/2	37 1/2	37
22	38 1/2	37 1/2	36 1/4
23	38	37 1/4	35 1/2
24	38 1/4	37 1/4	35 1/4
25	38 1/4	37 1/4	35 1/4
26	38 1/4	37 1/2	35 1/2
27	38 1/4	37 3/4	35 1/2
29	39	38	35 1/4
30	39	38	35 3/4

Get the Protection Concrete Insures

Will Jack Frost catch your corn crop? Why take any chances? With a silo you are prepared.

The ideal one is the Concrete Silo. Low in first cost, it is also permanent, fireproof, vermin-proof, wind-proof and water-tight.

Concrete corn cribs keep out the rats and mice. Concrete manure pits prevent loss of valuable fertilizing elements. Concrete in and about the dairy barn increases milk production. Concrete feeding floors and hog houses keep hogs healthy—and profitable. Concrete also protects farm buildings, and your home itself, against fire.

Send for these Free Books

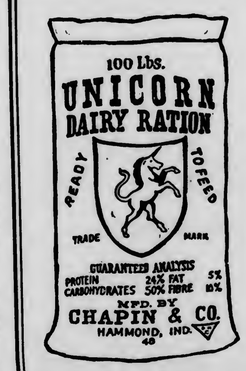
We will gladly send you on request our two free booklets "A Hundred and One Farm Uses for Concrete" and "Permanent Repairs on the Farm." They show you how you can make many permanent improvements about the place at a big saving. They give you simple directions for proportioning and mixing the materials. They tell you how to get the greatest value out of every sack of cement you buy. Send for these two free booklets today!

PORTLAND CEMENT ASSOCIATION

1315 Walnut Street PHILADELPHIA, PA. Farmers Bank Building PITTSBURGH, PA. Union Trust Building WASHINGTON, D. C.

A National Organization to Improve and Extend the Uses of Concrete

Offices in 29 Cities



By feeding 3 bags of Unicorn instead of 4 bags of any other feed, you get the same amount of milk at less cost.

CHAPIN & COMPANY
CHICAGO, ILLINOIS

OCTOBER PRICES
F. O. B. PHILADELPHIA
Country Stations

The same prices for basic milk as quoted above under September apply in October, subject however, to change whenever warranted by market conditions.

All milk shipped during October will be classed as basic milk.

A community twenty years from now is just as strong as its schools are today.

Fall is the time to put away the tools used during the summer, and that should mean that it is also the time to paint their moving parts and sharp edges liberally with old crank case oil.

Pick seed corn early, before severe frosts damage its vitality.

DAIRY COUNCIL SERVICE

The various departments of the Philadelphia Inter-State Dairy Council

Is Yours for the Asking Without Cost

Arrangements may be made, subject to previous engagements, for lecturers and speakers on Health and Nutrition Topics.

MOTION PICTURE FILMS ON DAIRYING SUBJECTS

PLAYS FOR THE CHILDREN

LANTERN SLIDES, LITERATURE, POSTERS, ETC.

The Dairy Council has carried the message of "Milk for Health" to thousands of consumers and producers. Why not include those in your community?

There is no charge for this service for local I. M. Pa. Meetings, Community or Local Meeting in the Philadelphia Milk Shed

Let Us Plan Your Entertainment

Write for detailed information

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

SUMMER CAMP AT CAMP JOY

One of the major projects of the Philadelphia Inter-State Dairy Council has been its work during the summer months in camps, and playgrounds.

The largest project on camp work has been at Camp Joy; near Reading, Pa.

This camp was located on an old estate just outside of the city and is leased by the Visiting Nurse Association of Reading for the purpose of conducting a camp for under-nourished children, selected from the Reading Public Schools.

The camp was under the direction of Miss Martha Stedman Smith, of the Nutrition Department of the Philadelphia Inter-State Dairy Council, together with a competent corps of helpers selected from Penn State College, New Jersey State College, Delaware State College and the Universities of Pennsylvania and Minnesota.

The camp was divided into two periods of three weeks each. The first period was attended by 70 girls. The next three weeks was attended by 63 boys.

A rigid routine of rest and milk and wholesome meals, inter-dispersed with plenty of fun brought results in the form of unexpectedly large gains in weight. The Philadelphia Inter-State Dairy Council furnished the milk with which the children were supplied twice a day. Many of the children drank as much as two quarts a day. The average gain per child during the girls' three weeks was 1.75 pounds. The greatest gain during the camp period was 6 1/2 pounds. Gains in height were appreciable, which demonstrated the value of the corrective posture work.

The boys' gains were not quite so high, but it is believed that this is due to the fact that the boys were much more active than the girls.

A large amount of publicity was given to the camp in the Reading papers. Almost every Sunday brought a feature story with pictures of the camp and during the week the activities were ably recorded in long and enthusiastic stories.

During the season the camp entertained such clubs as the Rotary, Lion, and Kiwanis Clubs. The latter voted to take on Camp Joy as a definite policy the coming year.

The camp season ended with an evening's entertainment at which 400 people were present. Part of the program was a performance of "The Health Circus" and a talk by Miss Smith, in which she urged the parents of the children to carry on the good work begun at the camp.

It is expected that the Philadelphia Inter State Dairy Council will undertake the direction of the camp again next year.

DAIRY COUNCIL ACTIVITIES

A milk survey is just being completed by the United States Department of Agricultural Economics, in Philadelphia. The results of the survey are promised in October. It will bring forth some figures which will be of unusual interest to the dairy industry of the Philadelphia Milk Shed. The Department of Agriculture has promised to distribute the survey widely and promptly as soon as it is fully completed.

The survey covers eight different groups in the city—the wealthy group, the well-to-do, the middle class, poor, suburban, colored, Italian and Jewish groups.

Some important facts will be disclosed by the survey. Some of these are the consumption of butter and butter substitutes in the different groups; the condensed and fresh milk consumption; reasons for individuals drinking or not drinking milk; effect of different kinds of advertising on consumption.

A comparison of figures in the 1923 and 1924 report of the Dramatic Department shows a large increase in the total number of people reached by this department.

In 1923 a total number of 145,328 people attended Dramatic Department performances. June, 1924, completed a school year during which 289,437 people were reached. The program of this department was carried out in a great variety of places,—the Philadelphia public schools (nutrition classes and assemblies), Philadelphia high schools and Junior high schools, Philadelphia parochial schools, Philadelphia health centres, settlement and community houses, and a number of other places.

The 1924 report of food demonstration work discloses the following totals:

Grand total of food demonstrations (Oct., 1923-July, 1924)	90
Grand total of attendance (adults)	5,340
Grand total of attendance (children)	852
Average attendance adults each meeting	60
Average attendance children each meeting	10

Demonstrations have been conducted in the Public Schools, in settlements, for the Visiting Housekeepers' Bureau, Phipps' Institute, and health centres.

SOMETHING ABOUT COMMUNITY SPIRIT

The work in the western part of the milk shed has brought us into personal touch with some very real people. Perhaps it is the result of the environment but more likely it is the nature of the farmers who have chosen this environment. At any rate, we find here a fine example of that foundation of the co-operative movement, a neighborly community spirit.

Many business men as well as farmers are looking toward co-operation as a means toward fairer and more broad-minded methods in distribution and production in our economic life. Co-operation is based on the regard which one man holds for his neighbors' welfare. We are all coming to undertsand that no one may conduct a business or live a life with no regard for the other fellow. Transportation facilities, the telephone, machinery and growth in population are ties that are binding us closer and closer together. Therefore this neighborly spirit, this regard for another's welfare in business and in person is nothing more than co-operation. The locality with a well developed community spirit takes to a co-operative endeavor from their very nature.

It is in that light we like to have new members regard our Inter-State Milk Producers Association. We have now nearly 20,000 members, dairymen in Pennsylvania, Delaware, New Jersey and Maryland. We are a community for we have very definite aims in common and each man in helping himself is instrumental in helping his community neighbor.

Local branches of the Association are often placed in towns around which is built a splendid community spirit. It would be helpful to the organization as a whole if the members there could insert their group spirit into their local and thus into the Association as a whole. There is a great difference in the temper of our locals. Some are very much alive, centers of community activity and active in community gatherings. Others are a list of names, seldom get together in meetings and possess very little of that co-operative spirit. It would do no harm for you local officers who read this to stop a moment and decide which type your local is. Perhaps you think your people can't be gotten out to meetings or social gatherings centering around a milk association local. How hard have you tried to get them out and what attractions have you offered? The result is worth an effort.

Farmers and co-operative extension workers held over 245,000 demonstration meetings during 1923 in connection with their efforts to obtain the adoption of better farming and home-making practices. At these meetings either the method of performing an improved practice, such as mixing spray materials or culling poultry, was shown by a person trained in the practice of those attending the meetings studied the commencement or results of a practice involving a longer period of time, such as corn culture or child feeding, carried on by a person in the community under the direction of the county extension worker. The attendance at these meetings, according to reports to the United States Department of Agriculture, was more than 5,298,000.

A water system on the farm and in the farm home lightens loads and saves steps.

When—feeders say this

Quality as Well as Quantity

"I have used Larro for over 9 years and there is nothing that will duplicate it. Larro is the best milk feed there is. It does increase milk production."
JOSEPH NOWAK, Thompsonville, Conn.

"We have a herd of 15 Holstein cows which give nearly as much milk as some of our neighbors who are milking 25. My father says it is all in the feed. We feed Larro."
H. E. COLE, Epping, N. H.

Good Condition and High Production

"We have fed enough Larro to test it thorougly. We find it an excellent milk producer—at the same time keeping the heavy producer in good flesh."
O. O. BUSCHLEN, Bad Axe, Mich.

"My cows are in the 'pink' of condition and produce heavily. Four of my cows have tipped the scale at 60 lbs. of milk in one day; two of them have reached 65¾ and 64¼ lbs.—cows that were producing very little milk on all kinds of miscellaneous feeds. This is my result from feeding Larro and I shall continue to feed same as long as I have cows."
A. HERBERT, Westport, Mass.

Larro for Long-Time Results

"We started with one cow for our own family use and now we are keeping between 400 and 500 head on our farm, and the cows we started with and have been milking for more than 12 years are yet profitable producers. We are glad that we commenced our dairying experience in feeding Larro and have never changed since our beginning with our family milk cow."
WHITE BELT DAIRY, Lemon City, Fla.

"Your feed is the best feed on the market, as it produces the richest milk and cream. We have tried other feeds but have not found them satisfactory. We have used Larro for over 7 years."
H. A. COUCH, New Milford, Conn.

"We have fed Larro along with other dairy rations and it gives us better results than any we have tried. We also find the longer we keep the cows on Larro, the better they milk."
W. B. BRADSHAW, Cartersville, Ga.

Where Other Feeds Had Failed

"My first sack of Larro ruined my patronage for other feeds with the exception of Larro. From that one sack I got an increase in milk and as I kept on using Larro I got better results. I wouldn't give one sack of Larro for any two sacks of other feed I have ever used."
E. H. BAKER, Ironton, Ohio.

"We have been feeding Larro for several months in a test with several other feeds, with results which are highly favorable to Larro."
PEYTON T. GISH, Mt. Sydney, Va.

For Young Stock and Old

"I have two cows milking 100 lbs. of milk on 10 lbs. of feed apiece a day. If I could get alfalfa, I think I could get 60 lbs. from these cows apiece on 12 lbs. of Larro. One of these cows is 17 years old."
C. C. ROBINSON, Annapolis, Md.

"We think Larro feed is certainly great, and our whole herd looks fat and nice, and has produced lots of milk this winter We have one cow 14 years old that gives 42 lbs. of milk a day. We feed the calves on Larro and like the feed."
L. E. WETMORE, Canfield, Ohio

For Economy and Profit

"I have thoroughly tried out practically all standard makes of dairy feed and mixed many kinds myself, but have found nothing which will produce as much milk of fine quality—a regular amount—and keep the cows in fine condition like Larro does. It will give me at least 15% to 25% more profit than anything else I have ever found. If I had used it exclusively for the past five years, I would have saved many thousands of dollars."
LORING BROWN, Orlando, Fla.

"I use Larro as ever and am satisfied with the results from it. I did try some cheaper feeds, but lost out in production and was out money in the long run."
LAWRENCE BACHMAN, Tarentum, Pa.

Larrowe Bldg. THE LARROWE MILLING COMPANY Detroit, Michigan

What—is there left for us to say?

Larro

The SAFE Ration for Dairy Cows

NATIONAL DAIRY EXPOSITION

(Continued from page 1)

other material on food and feeding for the housewife and home economics teacher.

Material urging the further use of dairy products covered another booth.

Health material for use of teacher:

This was an exhibition of suggestions for teachers in the grade schools who teach health. Included in this booth were sample lessons of "Health Habits."

"Milk for Health Stories:"

This was an exhibiton of the various types of stories used in Dairy Council work.

"Health Plays:"

They were exhibited by a toy theatre and a film illustrating two of the plays. Theatrical billboards showed photographs of other plays.

Posters made an attraction booth while there was a special booth for School Children's Milk Posters.

Another was the show exhibit booth. This was the weekly food order for a family of four.

One of the most popular booths was the animals. Milk made the difference with rats, chickens and dogs. There were two of each animal. One was milk fed, the other had no milk.

The Publicity Booth showed a wealth of material, newspapers, feature articles, direct mail advertising, paid advertising, etc.

At each end of the exhibit was a large space with a seating capacity of about 100. In one space Dairy Council motion pictures were shown and in the other space food demonstrations, chalk talks, health stories and slide lectures were given.

On Tuesday, September 30, in the Auditorium Milwaukee, the Dairy Council gave a demonstration before a large audience. (Continued on page 10)

FEDERATION MADE GOOD THEIR PROMISE

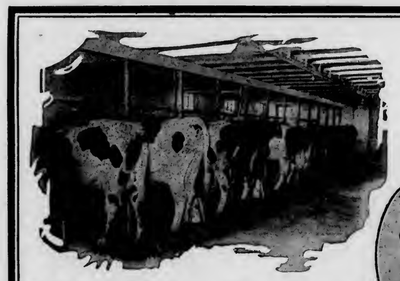
At the closing of last year's Feed Pool we asked you for your continued support in business. We take this opportunity of thanking you for giving it to us. We promised you we would improve our shipping service—we have done so. We promised you we would buy earlier—we did buy earlier. We promised you we would make you greater savings—we have made you greater savings. On the basis of the present market prices, our total tonnage of pooled feeds show that we have saved 4000 farmers in the neighborhood of $150,000. This is only a small part of the actual savings we have made farmers by reason of the influences of the low pool prices will have on prices of competing feeds. The success depended upon your loyalty and the credit, therefore, belongs to you.

POOL PRICES	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
P. F. C. F. Milk Makers 24%	$48.05	$48.05	$48.05	$48.55	$49.05	$49.55	$50.05
P. F. C. F. Milk Makers 20%	46.30	46.30	46.30	46.80	47.30	47.80	48.30
Protein Supplement 32%	53.55	53.55	53.55	54.05	54.55	55.05	55.55
P. F. C. F. Laying Mash 20%	49.25	49.25	49.25	49.75	50.25	50.75	51.25

These prices cover freight, car door man's commission and all other charges, to all points taking the Philadelphia rate of freight. Deduct 20 cents per ton for Baltimore, 50 cents for Rochester, $2.30 for Pittsburgh rate points. Add in case your station takes an arbitrary freight rate. Any advance in freight is for buyers account.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building **Philadelphia, Pa.**



I Have Taken Drudgery Away From Milking

I have done it for thousands of other farmers and I will do it for you. I will save more than half your milking time. I will save you the wages of one or more men. I will help you get more *milk, better milk,* a *real dairy profit.* *Those are big promises,* but with the EMPIRE Milking Machine I know I can and will make them good because the EMPIRE is the *simplest, the best, the most natural milker in the world.* It is so good that I have backed it with the *most sweeping guarantee ever heard of.*

Write me all about your milking problem *NOW.* Let me help you! Send for my latest EMPIRE Milker Catalog and a facsimile of MY GUARANTEE. FREE

H. E. McWHINNEY, President. EMPIRE Milking Machine Co., BLOOMFIELD, N. J.

EMPIRE Milking Machines

When answering advertisements Mention the Milk Producers Review

Gleanings From the Field

MEMBERSHIP WORK IN HUNTINGDON AND MIFFLIN COUNTIES, PENNA.

With the passing of the wheat and hay harvesting season the field organization service is abandoning the scattering membership work which has been done in special territories and returning to local drives again. These drives will probably last through the fall and well into the winter months until the weather drives us to cover again in the sections where good roads predominate. The tentative plans are to canvass the western end of the territory, covering these plants which are comparatively low in membership and swinging back east nearer the large marketing centers as winter comes on.

A small field campaign is now under way on the border of Mifflin and Huntingdon counties. Up to the present time 30 new members and 25 transfers have been reported from this section, making a total of about 55 new active memberships. The proportion of milk producers responding to the call for cooperation is very high, approximately 85% of the men with whom contact is established, joining the association.

The contrast between different dairying territories in the Philadelphia Milk Shed is brought out very vidvidly by the movement from northern Delaware to Mifflin county, Pennsylvania. In last month's "Gleanings" the characteristics of the Delaware dairying country were discussed and it is interesting to point out, in contrast to those, the features of the western or "border" section in which we are now working. No finer example of the importance of dependable fluid milk markets to farmers some distance from the larger markets could be cited than that found in this dairying locality.

Mifflin county, or a large portion of it, because of its distance from large population centers is what might be termed a "border" territory in milk production. The freight rates to Philadelphia make milk prices here such that only a high price schedule will draw a great many farmers into the fluid milk market. If the returns get too low some farmers drop off and turn to butter making and selling cream rather than shipping the fluid product. This is an illustration of one important factor in the variation of supply and demand and its effect on market prices. When prices are comparatively high more farmers in localities such as these on the border of the milk shed turn to fluid milk as their dairying industry and their milk supply added to that of sections nearer the city intensifies the tendency toward an oversupply. The conditions, in such a territory, are a real barometer of the market as a whole.

The farmers here, at the present time, seem to feel that their fluid milk business is giving them as good returns as any of the farm enterprises. More and more of them are turning from butter making to shipping. This tendency is all the more marked because of low prices that are prevailing in local centers for country butter. The country butter trade, in prosperous times, does not feel, in any great degree, the competition of creamery and storage butter. The selling point is the higher quality product received direct from the home churn. In times such as these, however, when unemployment is widespread and wages low, the townspeople are very careful of their expenditures. "A penny saved is a penny earned" becomes a very prevalent maxim and many workers are finding that this is the only opportunity they have for earning at the present time. As a result the country butter trade is poor and more dairymen turn to fluid milk sales. In this way the pressure of underconsumption is felt on country as well as city markets.

Organization, with a view toward cooperative marketing of the dairy product becomes very important to the dairyman in a border territory. In providing a more or less dependable price scale the marketing association often brings these men a market they would otherwise not enjoy. Perhaps the most important service the organization can render, however, is in passing out to these farmers reliable market information. No group of producers can establish and maintain arbitrary prices for their product regardless of the variation in supply and demand. If the supply is too great or the demand is too small the price must go down. A primary function of any marketing association lies in informing its members as to the supply and demand. This information is of great importance to a dairyman in a border section for a raise or a drop in price may mean a change from butter to fluid milk or vice versa. The producer in such a locality should have a weather eye toward market conditions at all times and try to arrange his dairy business, in so far as it is possible, with a thought for his market. The best means of keeping thus informed is, of course, through his marketing organization.

It is a great satisfaction, therefore, to find so large a proportion of the farmers here in Mifflin and Huntingdon counties responding to the call for support of the Inter-State Milk Producers Association. The only conclusion that can be drawn is that those farmers are becoming more and more interested in their marketing problem as a whole. This growth of interest and understanding is the only sure and safe road to a solution of those problems.

More farmers adopted improved practices in marketing their products in 1923 than in any other single phase of farm activity in which better methods established by experience and experiment were demonstrated by co-operative agricultural extension workers. The number of farmers adopting improved marketing methods through the influence of extension work during the year, according to reports to the United States Department of Agriculture, was 989,290.

Running-water systems were installed on more than 3,100 farms during 1923, according to reports to the United States Department of Agriculture by farmers and farm women who, through the efforts of agricultural extension workers, were interested in demonstrating ways in which this convenience may be economically placed in farm homes and farm buildings.

Everybody drink milk.

BLACK BARREN FAIR

INTER-STATE DAIRY COUNCIL MILK BOOTH

One of the fall events in southern Lancaster county, Pa., and Cecil county, Maryland, is the annual fair and Farmers' Institute, which has been held annually for a number of years.

The fair was under the auspices of the Pleasant Grove Fair Association and was held at Black Barren Springs, September 4th and 5th. Fortune usually favors this annual event, it is said, with fair weather, although unfortunately, rain marred the program this year on the second day.

An aggregate of probably 8000 people attended the fair on the two days.

The first day was devoted to the awarding of many prizes for agricultural and horticultural products as well as industritial presentations, domestic science, art work, etc. Live stock awards were made largely on the second day of the fair.

On Thursday afternoon, the Philadelphia Inter-State Dairy Council presented under the direction of Miss Gertrude Munday, a health play, "Milk for the Whole World" and on the same evening, "The Health Circus." These different plays were staged by children and young men and girls of the local community.

In addition to this the Dairy Council conducted a "Milk Shake Booth." The proceeds of which were donated to the fair committee.

The Inter-State Milk Producers Association presented a display of sediment tests of milk made of its members' milk in the local communities. These proved of exceptional interest.

The speaking program on Friday was to a large extent abandoned. Addresses were to have been made by the Hon. F. P. Willits, Secretary of Agriculture for Pennsylvania and by H. D. Allebach, president of the Inter-State Milk Producers Association.

MONTGOMERY COUNTY COW TESTING ASSOCIATION

CARL A. SAGER, Tester R. G. WALTZ, County Agent

The following is a general summary of the activities of the Montgomery County Cow Testing Association for the month of August.

Cows in milk, 270; cows dry, 63; cows producing over 40 pounds of fat, 21; over 50 pounds of fat, 2; 11 cows produced over 1,200 pounds of milk and 35 cows over 1,000 pounds of milk. There were three unprofitable cows disposed of during the month.

The highest cow for butterfat was Lily, a pure bred Holstein owned by J. L. Wood & Sons of Red Hill, she having produced 1,342 pounds of milk, 60.39 pounds of butterfat with a test of 4.5 per cent. She is six years old and freshened July 6. The second highest producing cow for butterfat was a pure bred Holstein owned by Ursinus College, Collegeville, she having produced 1,528 pounds of milk and 47.37 pounds of butterfat.

Following are the ten highest producing cows in butterfat for the month of July:

Owner	Name and Breed of cow	Age Yrs.	When Fresh	Lbs. Milk	Lbs. Butterfat
J. L. Wood and Sons	Lily, P. B. H.	6	July 6	1342	60.39
Ursinus College	No. 1, P. B. H.	5	Mar.	1528	47.37
H. Murphy	136		July 22	1212	47.27
A. A. Heebner	No. 1, Gr. H.	10	June 23	1249	46.21
A. A. Heebner	No. 11, Gr. H.	4	Apr. 16	1274	45.86
W. J. Hendren	B. Jolly, P. B. J.	12	May 18	856	45.37
C. Wm. Haywood	B. 2nd, Gr. J.	9	June 26	1066	44.67
O. M. Woodward and Son	Roxy, P. B. B. S.	6	Apr. 8	1051	44.14
W. J. Hendren	J. R. Lassie, P. B. J.	3	May 31	756	43.85
A. K. Rothenberger	Annie, P. B. H.	6	Apr. 12	1287	43.76

The following herds had the highest milk production:

Name	Cows Milking	Average Lbs. Milk
Christian A. Wiemer	3	951
Ursinus College	12	940
A. A. Heebner	12	871
Mrs. Howard Bieler	11	858

The following herds had the highest average butterfat production:

Name	Cows Milking	Average Lbs. Fat
Christian A. Wismer	3	33.9
School of Hort.	5	32.9
Ursinus College	12	30.8
J. Alan Middleton	2	30.5

The following herds had the highest average test:

Name	Average Test	Breed
W. J. Hendren	5.69	Jersey
School of Hort.	4.80	Mixed
Vincent Alderfer	4.53	Mixed
C. Wm. Haywood	4.19	Brown Swiss

The highest testing cow for the month was a pure bred Jersey owned by W. J. Hendren of Trappe, her test being 7.1.

LEWIS LINSEED CAKE and CAKE MEAL

will help to keep your cows in good condition and increase the milk flow.

Lewis Linseed Meal is finely ground and free from dirt.

"Finest thing in the world for cows"—your neighbor who uses it will tell you.

Stop in at our factory 2545 Aramingo Ave. Philadelphia, and see how it is made.

Dutch Boy Paint Products also manufactured:
White-Lead, Red-Lead, Linseed Oil, Liquid Lead, Flat Paint, Colors

John T. Lewis & Bros. Co.

705 Lafayette Building **Philadelphia, Penna.**

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK FROM COW TO CONSUMER

Lansdowne Milking Stool

Patented

Weight only 3½ lbs.

Sanitary
Light
Durable

$2.00 Each

Plus Delivery Charges

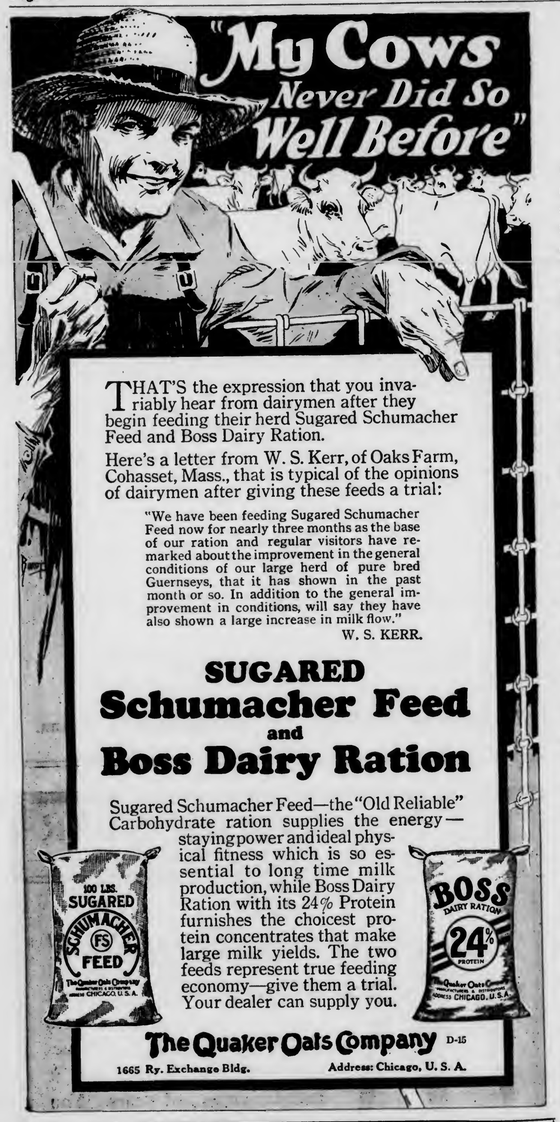
This is a stool you cannot compare with any other—it is simply and strongly constructed. The cost is low and it lasts for years and years. You cannot wear out a Lansdowne.

Made of a single and solid piece of GALVANIVED MALLEABLE IRON, which cannot crack, rust or rot.

Send for copy of big, new, free Bestov Supply Book for Dairymen. One hundred pages—over 200 items each one priced.

Cherry-Bassett-Winner Company

1918 Market St., PHILADELPHIA 33 So. Charles St., BALTIMORE



THAT'S the expression that you invariably hear from dairymen after they begin feeding their herd Sugared Schumacher Feed and Boss Dairy Ration.

Here's a letter from W. S. Kerr, of Oaks Farm, Cohasset, Mass., that is typical of the opinions of dairymen after giving these feeds a trial:

"We have been feeding Sugared Schumacher Feed now for nearly three months as the base of our ration and regular visitors have remarked about the improvement in the general conditions of our large herd of pure bred Guernseys, that it has shown in the past month or so. In addition to the general improvement in conditions, will say they have also shown a large increase in milk flow."

W. S. KERR.

SUGARED
Schumacher Feed
and
Boss Dairy Ration

Sugared Schumacher Feed—the "Old Reliable" Carbohydrate ration supplies the energy—staying power and ideal physical fitness which is so essential to long time milk production, while Boss Dairy Ration with its 24% Protein furnishes the choicest protein concentrates that make large milk yields. The two feeds represent true feeding economy—give them a trial. Your dealer can supply you.

The Quaker Oats Company D-15

1665 Ry. Exchange Bldg. Address: Chicago, U. S. A.

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY

PAINTS AND VARNISHES

Write for Color Cards and Booklet "Paint Pointers"

EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE
PRINTER

BELL PHONE No. 1 WEST CHESTER, PA.

BASIC AND SURPLUS PLAN

Inter-State Milk Producers Association In Effect October 1, 1924

In order that the members of the Inter-State Milk Producers Association might be fully informed as to the general plans in effect for 1925, the following detailed explanation of the basic and surplus plan is printed:

This plan is in general effect the same as adopted for 1924, and is subject to revision as conditions arise.

The following method of determining price to be paid the farmer will be in force during 1925 and until further notice.

Each producer shall be credited with the amount of milk delivered by him during October, November and December, 1924. The average production of these three months shall be known as the "basic quantity." These amounts are to be posted at the receiving station and duplicate copies sent to the Inter-State Milk Producers Association.

During the following nine months he will receive the basic price for the following percentages of this amount of milk:

Jan.	100%	April	100%	July	110%
Feb.	100%	May	100%	Aug.	110%
March	100%	June	100%	Sept.	115%

Additional milk produced during these months, if any, to be paid for on the following basis:

A committee of three, one from the producers, one from the manufacturers and one from the dealers, will check up, each month, the average price of New York 92 score solid packed butter, as published by the United States Bureau of Markets for that month and immediately inform all concerned what the price may be. Payment for all additional milk as above determined, to be made according to the following schedules:

No. 1. Producers who have been regular patrons of a receiving station, or regular shippers to a dealer, who have established a basic quantity during October, November and December, 1924, are to receive the basic prices for basic quantity. For an amount of additional milk less than or equal to the basic amount, 92 score New York butter plus 20%. For all additional surplus above an amount equal to basic quantity, a price based on 92 score New York butter without the 20% premium for the months of January, February, March, April, May and June. During July, August and September all shippers shall be paid for additional milk a price based on 92 score New York butter plus a premium of 20%.

No. 2. A. All former patrons at a receiving station or direct shippers to a dealer who make no milk through October, November and December and who therefore, established no basic quantity, if they resume shipping in January, February and March, shall be paid a price for all their milk based on 92 score New York butter plus a premium of 20%.

B. If they fail to resume shipping until April, May or June they shall be paid a price based on 92 score New York butter for the months of April, May and June. For July, August and September the price to those shippers shall be 92 score New York butter price plus a premium of 20%.

No. 3. Men starting in the dairy business and who therefore have not established a basic quantity who desire to start to ship milk during any one of the first nine months of 1925, shall be allowed to establish a basic quantity by calculating one-half of the daily average of the amount produced by such shippers during the first thirty days of shipment and thereafter counting this as the basic quantity during the remaining months.

No. 4. In case of tenants changing from one farm to another or farm owners selling out and repurchasing a farm elsewhere and who by this procedure change buyers of their milk, it is definitely understood that the basic quantity established goes with the cows.

No. 5. Special cases of one or more producers changing to new buyers are open to agreement between such producers, buyers and Inter-State Milk Producers Association.

This agreement covers all points in the territory. Any of the three parties interested, that is the distributors, manufacturers and the Inter-State Milk Producers Association reserves the right to ask for a conference to consider the situation if it feels its interests are being jeopardized thereby.

Example of the Calculation of a Basic Quantity

Farmer A produced
2100 lbs. milk in October
2000 lbs. milk in November
1900 lbs. milk in December
Average for three months, 2000 lbs.

If 3000 pounds were shipped in May, or any other month, this would represent 2000 lbs. basic milk, to be paid for at the maximum or basic price and 1000 lbs. surplus, to be paid for as provided in the foregoing agreement.

NATIONAL DAIRY EXPOSITION

(Continued from page 7)

The program was as follows:

1. Chalk Talk—Milk and Teeth, Lucille Philbrook, Philadelphia Inter-State Dairy Council.
2. Address—Co-operative Quality Improvement and Control, C. I. Cohee, Philadelphia Inter-State Dairy Council.
3. Monologue Demonstration—American Girl Beauty Product, Gladys Coon, National Dairy Council.
4. Dairy Council Lecture—What to Eat, and Why, Dorothy Buckley, Connecticut Dairy Council.
5. Cooking Demonstrations—Showing How to Use Dairy Products, Louise E. Northup, Philadelphia Inter-State Dairy Council.
6. Three Minute Talks.
7. Dairy Council Play—"Health Circus," by children from Milwaukee Public Schools, directed by Gertrude Munday, Philadelphia Inter-State Dairy Council.

Don't let the woodlot be used as a grazing ground. The feet of the cattle bruise the roots at the base of the trees and this gives entrance to insects and disease spores.

Uncle Ab says he's seen it a lot wetter and a lot drier, but that all in all, there isn't much better weather to be had than what we're getting.

Your Guarantee!

Clean Milk

—and we prove it by actual test to your entire satisfaction. You won't find any dirt or sediment in milk after it has been through a Dr. Clark Purity Milk Strainer. The thick discs of sterilized cotton, tightly clamped to bottom of strainer, successfully remove every particle of dirt, dust, muck and other sediment. We positively Guarantee those results or refund your money.

Dr. Clark's **Purity Milk Strainer**

Used and endorsed by Agricultural Colleges, Dairy Inspectors and the largest Dairies and Milk Producers in the United States.

Made in two sizes:—10 quart and 18 quart. If your Dealer can't supply you, write us for descriptive literature and prices, giving your dealer's name.

PURITY Cotton Discs are made in any size from 5 1-2 in. to 7 in. diam., for all makes of strainers or filters. Send for a trial order.

Purity Stamping Company
Dept F Battle Creek, Mich.
Worlds Largest Manufacturers of Cotton Discs for strainers and filters.

HARDER SILOS

Are Easier To Buy

You can now buy a genuine Harder Silo on the most liberal terms ever offered to silo purchasers. You can meet the payments out of your milk checks and soon own clear and free the best silo that money can buy.

The new patented Harder-Victor Front is the most important silo improvement of recent years.

Write today for particulars and our free book, "Saving with Silos." Tell us how many cows you are milking and we'll also send a valuable Handy Pocket Record Book, especially arranged for farm accounts.

HARDER MFG. CORP.
Box G Cobleskill, N. Y.

INTEREST IN CATTLE TB CLEAN-UP SWEEPS STATE

Progress in the tuberculin testing of cattle during the past eighteen months is one of the most important single advancements made by the Pennsylivania live stock industry, states Secretary Frank P. Willits, Pennsylvania Department of Agriculture, in commenting upon a recent report by Dr. S. E. Bruner, Bureau of Animal Industry, who has immediate charge of the tuberculosis eradication work in this state.

Dr. Bruner's report shows that since April 1, 1923, over 230,000 head of cattle have been tested, 156,218 of these being in localities where entire areas were cleaned up. The testing of all cattle in given areas not smaller than townships started in Mercer County in April, 1923. Since that time ten other counties: Butler, Crawford, Jefferson, Elk, Lawrence, Warren, Clarion, McKean, Clearfield and Beaver, have had one or more townships tested.

In Clarion County 552 herds, totaling 2,855 cattle, were tested in three townships and only nine reactors were found. Two townships were given the test in Elk County and ten reactors were discovered among 2,606 cattle in 541 herds. In McKean County only two reactors were found in one township where 852 cattle were tested. Two townships in Warren County had 126 reactors in 321 herds of 3,741 cattle. In Lawrence County two townships had 29 reactors in 1,767 cattle. The number of reactors in all these areas has been extremely small ranging from 0.23 per cent in McKean County to 3.3 per cent in Warren County.

In addition to the cattle already tested in solid areas, Dr. Bruner reports that 145 townships in 20 counties are now making plans for the area test. These townships will have 19,034 herds or 112,869 cattle for test. The counties concerned are Elk, Lawrence, McKean, Clearfield, Beaver, Columbia, Blair, Erie, Westmoreland, Tioga, Center, Union, Bradford, Monroe, Butler, Fayette, Warren, Susquehanna, Indiana, and Cameron. In three counties: Lawrence, Columbia and Butler, this test will include the entire cattle population.

The adoption of the area plan for tuberculin testing has greatly increased the efficiency of the work and has been one reason why more cattle could be tested in 1923 alone than in the entire period from 1920 to 1923, Department officials report. This method offers such promise of complete eradication that Secretary Willits supported by the live stock owners and others interested in the health of the people of the state, is asking in his budget for liberal appropriation to pay the losses suffered by live stock owners who have reactors.

109 Registered Dairy Cattle 109

In 2 Bradford County, Penna. Public Sales

Livestock Sale Pavilion, Troy, Bradford County, Penna.

A nearby source of reliable dairy cattle direct from breeders. Excellent Train Facilities. Prompt Shipment.

1st SALE—50 Registered Jerseys
Mostly of producing age, many heifers, a few bulls.

Friday, October 17, 1924

2nd SALE—59 Registered Holsteins
Many cows ready for production, some young heifers ready for growth on roughage, several excellent bulls.

Saturday, November 1, 1924

A catalog will be sent if you want it. Address inquiries to

D. K. SLOAN
Secretary of Sale Committee
TOWANDA, PENNA.

Willard
Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station
WEST CHESTER, PA. COATESVILLE, PA.

FREE to Dairy Farmers

Bigger EARNINGS from COW—SOW and HEN

Send today for this new Jamesway book. It may save you many dollars. Find out how Jamesway is cutting out needless labor costs and hard work—enabling folks to live better, happier and put away more profits each year from cows, hogs and poultry. Also, learn about Jamesway "Pay from Earnings" plan on putting in stalls, pens, drinking cups, etc. Jamesway Service is given personally right on your farm by our Jamesway man in your territory. Write today. Dept. E

WE SELL DIRECT TO USER

JAMES MFG. COMPANY
Jamesway Ft. Atkinson, Wis. Elmira, N. Y. Box E Minneapolis, Minn.

REG. GUERNSEY BULLS
8 to 18 months old. From A. R. Dams. Best of breeding. Accredited herd.
C. A. WRIGHT & SON CANTON, PA.

E. NEWLIN BROWN
Live Stock Auctioneer
WYCOMBE, BUCKS CO., PA.
Sales Anywhere —Anytime

CRUMB'S Chain Hanging **Stanchions**

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.

WINTER DAIRYING PAYS FARMER BEST

Easier and Cheaper to Produce Milk and Raise Calves in Fall Than in Spring

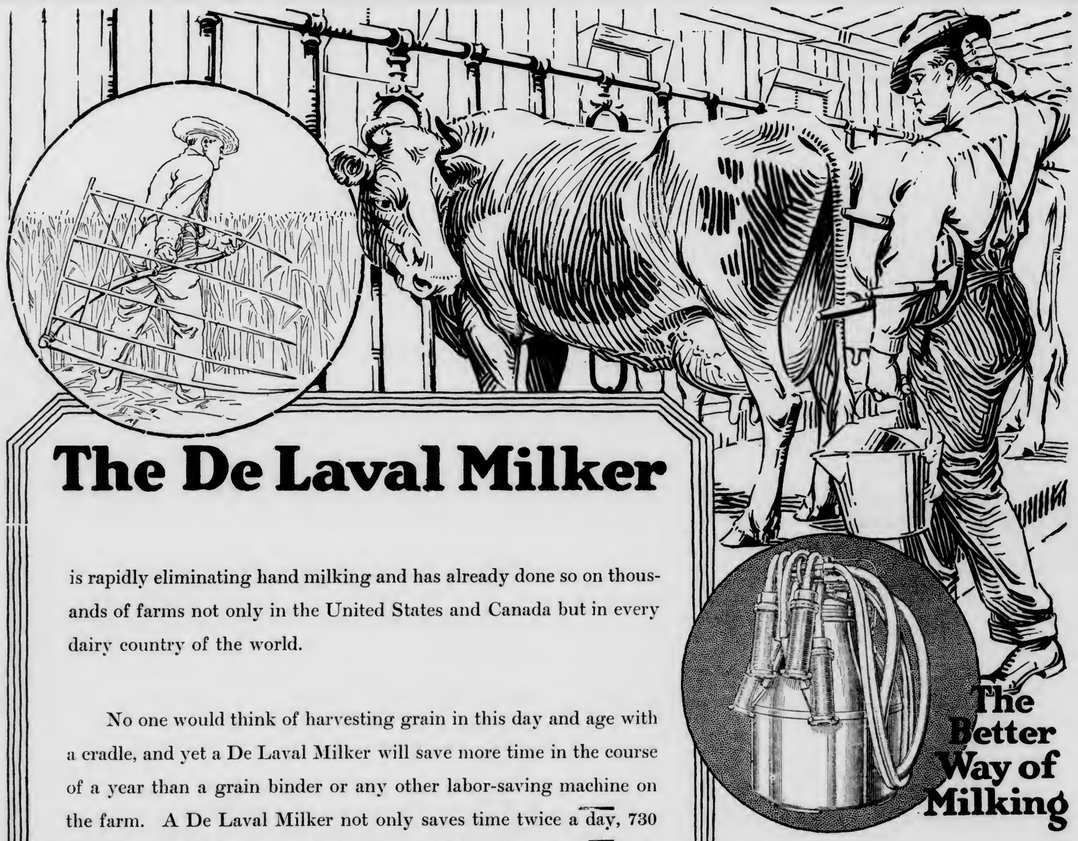
Winter dairying pays, according to Professor H. A. Hopper of the state college of agriculture at Ithaca. He says that with certain exceptions in the cheese sections of New York State the farmer who breeds his cows to freshen in the fall will get more from the volume of cream produced than he would if they freshened in the spring.

A study of the prices paid for creamery butter over a period of thirteen years shows that the price paid for butter on the larger markets of the United States has invariably been higher in the fall and winter and lower during the spring and summer.

Professor Hooper goes further in saying that the fall calf is also cheaper to raise because it is fed milk, grain, and hay during the winter months and by spring is old enough to get much of its feed from pasture, while spring-born calves must be fed milk and grain during the summer, and hay, grain, and silage the following winter. This makes the spring calf cost considerably more at one year of age than the fall calf.

Farmers likewise have more time to devote to raising calves during the fall and winter than in the spring, when the rush of getting in crops demands so much attention. With a fall dairy it is easier and cheaper to deliver good quality cream, because of cool weather, lack of flies and dust, and because the fall-freshening cow is fed dry feeds during her period of greatest production. All these advantages become disadvantages in the case of the cow that freshens in the spring.

Hand Milking will soon be as Old Fashioned as Hand Harvesting



The De Laval Milker

is rapidly eliminating hand milking and has already done so on thousands of farms not only in the United States and Canada but in every dairy country of the world.

No one would think of harvesting grain in this day and age with a cradle, and yet a De Laval Milker will save more time in the course of a year than a grain binder or any other labor-saving machine on the farm. A De Laval Milker not only saves time twice a day, 730 times a year, but because of its stimulating and soothing action almost invariably causes cows to produce more milk than by any other method—either hand or machine—and in addition produces cleaner milk.

EASY TERMS: If you are milking 10 or more cows by hand you can soon pay for a De Laval Milker through the time it will save and extra milk of better quality it will produce. Sold on such easy terms that you can use it while it pays for itself.

The De Laval Separator Company

NEW YORK 165 Broadway — CHICAGO 29 E. Madison Street — SAN FRANCISCO 61 Beale Street

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSO[illegible]

VOLUME V — WEST CHESTER, PA., AND PHILADELPHIA, PA., NOVEMBER, 192[illegible] — NUMBER 7

CONSUMERS DEMAND FOR M[illegible] [illegible]ADELPHIA

A Comprehensive Survey Conducted by the Bureau of Economics, [illegible]rtment of Agriculture, Pennsylvania Department of Agriculture and [illegible]er Agencies

The United States Department of Agriculture has just completed, through its Bureau of Agricultural Economics, a survey of milk consumption in Philadelphia. This survey was conducted during the past summer through interviewing the people of various groups, divided as to wealth and race.

EIGHT CLASSES DESCRIBED

It was believed that buying habits are materially affected by income and by race and nationality. In accord with this belief, the population of the city was divided into the following eight groups:

Poor, Middle Class, Well-to-do, Wealthy, Colored, Italian, Jewish, Suburban (Well-to-do)

The poor group consists of families judged to have a very meager income, living in extremely poor sections of the city. The middle class is composed of families of limited incomes financially dependent upon a wage earner. The poorer residential sections of the city were canvassed for this type of family. The well-to-do type of family was found in the good residential sections and had an income above the average, although generally this type of family did not employ servants. The wealthy group consists of families with large incomes, living in the very best sections of the city and employing one or more servants.

Colored, Italian and Jewish groups were each canvassed. In all three cases care was taken to secure a representative sample of incomes within the group. That is, wealthy as well as poor colored families were covered so that group characteristics rather than income characteristics are emphasized. Suburban families were interviewed in several sections but each suburban family falls within the class of well-to-do. It is of interest to note how closely the average sized family and the per capita milk consumption compares between the city and the suburban well-to-do families.

QUESTIONNAIRE RESULTS

Milk Consumption

Four hundred families, the total number interviewed, consumed an average of 2.96 pints of milk per family daily. About 67 per cent. of this amount was used for drinking. The remainder was used for cooking and other purposes.

Per capita consumption was .63 pints per day. This figure compares with the estimated per capita consumption of .75 pints per day obtained by dividing the daily Philadelphia milk receipts by the population (1923) and with the estimated per capita consumption of .74 pints per day in 1922. These two later figures make no allowance for milk which is manufactured into ice cream or other dairy products after it is shipped into the city. Neither does the per capita consumption figure of 0.63 pints per day take into account the milk consumed by individual members of the family during lunches away from home and at fountains in milk drinks.

It is interesting to compare this figure of .63 pints per day with the estimate made in the Philadelphia area four years ago, when the Philadelphia Inter-State Dairy Council was formed. At that time it was estimated that the amount consumed was .54 pints for all kinds of milk; or, in other words, the total at that time was .54 per capita per day and now it is approximately .75 pints per day, for all kinds of milk, or a total increase of forty per cent.

Per family consumption, as shown by the results of the mail questionnaire, was 2.87 pints per day. Two hundred seventy-six pints daily were reported by families in the mail questionnaires as being used for drinking purposes as against one hundred twenty-eight used for other purposes.

Milk consumption, both per family and per capita, was least with the Colored Group increasing through the Italian, Poor, and Middle Groups in the order named. Per capita consumption was about the same within the Jewish, Suburban, and Well-to-do Groups with the Wealthy Group showing the highest consumption, both per family and per capita. It is interesting, however, that per capita consumption, for drinking purposes only, was low within the Wealthy Classification, and that the Jewish Group is highest in this regard. In other words, the increase in consumption in the Wealthy Class must be caused by an increased amount used in cooking. In stating the importance of milk, meat, and bread nearly half the Jewish people interviewed said that milk was the most important food in their household and meat the least important, while less than a fifth reversed the order. The Jewish religion does not permit the use of meat and milk at the same meal and apparently the majority prefer milk. This explains and substantiates the figures in the table below showing the Jewish as the largest consumers of milk per capita for drinking purposes.

Italians, as a class, appeared to prefer other beverages to milk. The Colored Group was lowest in per capita consumption of fresh milk, but this was offset by the fact that this group was highest in consumption of buttermilk. One dealer serving many in the Colored Group explained that they were good users of milk over the week-end when they had just received their weekly wages.

Relative Importance of Foods as Indicated by 117 Housewives

FOOD	RANK	SCORE
Fresh Vegetables	1	311
Meat	2	297
Bread	3	260
Milk	4	222
Fruit	5	145
Potatoes	6	110
Eggs	7	108
Cereals	8	62
Butter and Cheese	9	46
Desserts	10	26
Poultry	11	24
Fish	12	15
Salads	13	5
Macaroni	14	3
Canned Vegetables	14	3

DAILY MILK CONSUMPTION IN PHILADELPHIA

Per Family and Per Capita Consumption in Pints by Groups of Fifty Families Each

	Poor	Middle	Well-to-do	Suburban	Wealthy *	Colored	Italian	Jewish
Per family	2.56	2.86	3.30	3.24	4.48	1.50	2.16	3.60
Per capita	.51	.60	.78	.77	.81	.39	.42	.78
Per capita (Drinking)	.39	.45	.50	.54	.39	.23	.29	.59

*Servants included.

GRADE PREFERENCE

Of the total milk consumed by the 400 families, 49 per cent. was Grade B, 42 per cent. Grade A, 3 per cent. Grade AA and 2 per cent Certified. Of 4 per cent. the grade was unknown and approximately 7 per cent. of the families interviewed were not using any fresh milk. All the certified and AA milk was used for babies. Leaving these two grades out of consideration, about 44 per cent. of the people taking milk used Grade A and 56 per cent. used Grade B.

Price, quality, and the purpose for which the milk is to be used are the principal factors influencing grade selection. There is a price differential of 2 cents per quart, except in the case of one dealer who maintains a differential of 3 cents, between Grade A and Grade B. The difference between the two grades is in butter-fat content and also in that Grade A milk has a much lower bacteria count. In a number of cases where families were found to be using both grades, Grade A was used for drinking and Grade B for general cooking purposes.

MILK CONSUMPTION GREATER WITH CHILDREN THAN WITH ADULTS

The Use of Milk As a Drink Decreases Directly With Increasing Age

Those drinking milk in each age classification and the frequency with which they drink it was developed. This shows that a large percentage of the children under three years of age drink milk. With advancing age, however, this percentage gradually and steadily decreases. The first sign of decline in the importance of milk as a beverage appears in the change from drinking it every meal to drinking it once or twice a day, or occasionally, as the children grow older. Until the children are 12 years of age, the percentage is fairly constant for those not drinking milk. During the ensuing six years, however, this figure is doubled and in the adult group is redoubled. The figure of 15 per cent. of the infants never drinking milk is explained by the fact that a number of the infants were being nursed by the mothers. Results of the mail questionnaire shows the same relative variations by age in the peceentage drinking milk and the frequency with which it is used.

If milk consumption is to be increased within a given group of individuals the increase must come within the class of older children and adults. It is the general impression that, while milk is an important item of diet for babies and younger children, it loses its value as the individual becomes older. If they can be convinced that milk is a food,

(Continued on page 10)

NATIONAL DAIRY SHOW AWARDS AND EXHIBITS FOR DAIRY CATTLE AT THE 1924 WISCONSIN EXHIBIT

CHARLES A. WILSON AND DR. E. G. LECHNER

A comprehensive review of the various breeds of dairy cattle shown at the National Dairy Show, held recently in Milwaukee, Wis., has been prepared by Messrs. Charles A. Wilson and Dr. E. G. Lechner, of the Quality Control Department of the Inter-State Dairy Council, from which the following extracts have been taken.

HOLSTEIN FRESIAN BREED

The Holstein family had the largest exhibit of any of the dairy breeds. The world's champion milk cow, Segis Pietertje Prospect from Washington who produced 37,381 lbs. of milk in one year, attracted considerable attention. In the show ring this cow placed seventh in the A. R. C. class. She was beaten by her sisters who were bred for production and show type combined although they had lower milk records. The American Champion butter cow, May Walker Ollie Homestead who produced 1532.6 lbs. was placed tenth in this class. She did not combine show qualities although her son and daughter bred by King Segis Pontiac Count placed first in their respective class, the son being Junior champion of the show, Johanna Rag Apple Pabst owned by Mr. Jos. E. Pick of Hartford, Wis., was Grand Champion. This animal was bought when a month old from a neighbor and raised by the present owner. Owing to financial difficulties this bull was not shown at the National Show last year. Madam Artis Wayne Denver was the grand champion cow. She was a wonderful outstanding individual for show and production types combined. She was picked by Judge Moscrip as the all American two year old in 1923. The outstanding of the Holstein breed was in the get of sire class where Piebe Laura Ollie Homestead placed his get one and two.

These animals were judged by Moscrip and Elder.

GUERNSEY BREED

The Guernsey breed was represented by 241 animals. Wisconsin was almost as well represented in this breed as the Holsteins. Shorewood Resolute, a three year old bull owned by the Emmadine Farm, N. Y. was awarded the Senior and Grand Champion prize. He is a very fine individual and has not been beaten in the ring this year. Mixter May Princess, owned by the Emmadine Farm was the Grand Champion cow, also the senior champion. She was an individual with outstanding dairy qualities. She was given real competition for Grand Champion by Honey Bloom of the Prairie and received the purple ribbon only thru her wonderful dairy temperament.In the get of sire class Lady Smith's Cherub was placed first over a get of four females by Cherub's Prince. We believe that the latter's get should have been given more consideration as they had been milking for a period of one or more years, and showed wonderful dairy type, whereas Lady Smith's Cherub get conformed more to the show type. In the aged cow class Honey Bloom of the Prairie won first in a class of twenty four.

One of the novel features of the Guernsey breed was Glenwood Miss Greta, a pure bred cow who was bought in 1915 for $500 on a note. From this cow the owner raised a herd of twenty-five females in the nine years. These are all good individuals showing dairy qualities and possiblities.

The Guernsey's were judged by Scoville and Kildee.

JERSEY BREED

The Jersey breed had 131 animals classed. The Twin Oakes Farm of New Jersey took eleven of the 19 blue ribbons. Fern's Wexford Noble owned by the Twin Oaks Farm was Senior and Grand Champion bull. This bull has not been defeated in the ring for the past three years. Fern's Oxford Dianna owned by the Twin Oakes Farm was Senior and Grand Champion cow, winning this honor from Xenia Surprise who showed more style and finish but carried a poor udder. The aged cow class had fifteen entries with Fern's Oxford Dianna winning honors.

The Jersey Profit Barn was a good idea to show the relationship between production and scientific feeding. In this stable were cows collected from various farms and fed and milked. In each cow's stall hung a chart showing the cost of feeding and the value of their product and the profit each returned per day. The profits varied from .05 to .86 a day. The cow that made a profit of .05 a day which was the first day made .49 the fifth day.

The Jersey's were judged by Tucker and Sisson.

AYRSHIRE BREED

The Ayrshire breed boasted of 190 animals of very uniform type. Canada was very well represented in this breed as was Pennsylvania. Strathglass Roamer owned by the Barclay Farms, Pa., won Junior and Grand Champion honors over Cavalier Ping-Pong owned by Sietes and Son of Waukeeshau, Wis., who was senior champion in the aged bull class. This was the older bull's first and only defeat. S. F. Helen R. owned by Sietes was senior and grand champion cow, which honor she has carried wherever shown this year. She is an outstanding animal of the breed. The aged cow class had twenty-seven entries with H. S. Helen R. getting the blue. The cow milked 28 pounds in the show ring. It appears as if the Ayrshire breed are coming forward rapidly as one of the chief dairy breeds. Five state herds were shown, Ontario taking first, Quebec second, Wisconsin third.

Ayrshires were judged by Fitch and McMillan.

BROWN SWISS BREED

This breed was represented by six states and although limited in numbers they showed very good quality. Prince of the Meadow Green owned by Marshall and Son of Michigan won the Senior and Grand Champion banner. The Grand Champion cow was Swiss Valley Girl 7th owned by Hull Bros., Ohio. She was also Senior Champion. In the aged cow class she placed first and third and fourth below her were her two sisters of the same sire. She is a remarkable cow considering her fifteen years of age. This was the first National Dairy Show at which she was ever shown. Betty of Lakeview, owned by Bower and Son, Illinois, was second. This cow has been champion and grand champion of many shows in the past. The get of sire class was composed of four aged cows, the get of Reuben.

The cattle were judged by Humphery.

The Farmers Barn housed ten daughters of Cedar Lawn Canary Paul 6th, who produced 412 lbs. of fat in one year against 342 lbs of fat produced by their dams. This is an average of 70 lbs. of fat increase in one year and shows the value of a pure bred sire. Two of these animals showed a decrease from the record of their dam but in each case the dam produced over 12,000 lbs. of milk. These two daughters however producing less milk than their dams produced a higher percentage of butter fat.

The cow testing associations are increasing very rapidly, showing the value of keeping records of each individual. The average cow in the U. S. produced 160 lbs. of fat, the average Wisconsin cow, 190 lbs., the average Wisconsin C. T. A. cow producing 273. The highest C. T. A. herd in Wisconsin is 534 lbs.

ANNUAL MEETING NATIONAL CO-OPERATIVE MILK PRODUCERS' FEDERATION WILL BE HELD IN DETROIT, MICHIGAN, NOVEMBER 14th AND 15th

Distinguished speakers will deliver messages to the Eighth Annual Meeting of The National Co-operative Milk Producers' Federation at Detroit, Michigan, November 14th and 15th. Senator Royal S. Copeland, long a favorite among New York dairymen, will touch upon legislative problems in the coming Congress. Dr. C. W. Larson, Chief of the New Dairy Bureau, U. S. Department of Agriculture, will present the international aspects of dairying, its relation to world markets and production trends.

The situation in New England will be discussed by Richard Pattee, Managing Director of the New England Milk Producers' Association, Boston, Mass. New England dairymen are now engaged in a campaign to organize that entire section into a single system controlled by farmers to co-operate upon the pooling basis.

The remarkable accomplishments in co-operative marketing of Minnesota butter will be described by John Brandt of Litchfield, Minnesota, President of the Minnesota Co-operative Creameries Association. Local co-operation is quite an old thing in Minnesota but a central selling agency to handle the products of several hundred co-operative creameries is a comparatively recent development.

The status of co-operative marketing of Iowa butter will be given by C. Bechtelheimer, Secretary of the Iowa Creamery Secretaries' and Managers' Association. Mr. Bechtelheimer is of Waterloo, Iowa.

How Wisconsin cheese is marketed co-operatively will be told by Frank C. Swoboda of Plymouth, Wisconsin, General Manager of the Wisconsin Cheese Producers' Federation.

President John D. Miller of the Federation, also Vice President of the Dairymen's League Co-operative Association, Inc., with headquarters in New York City, will strike the keynote of the Federation's legislature program. A foreglimpse of the attitude of this organization was given at the last directors' meeting when the Federation officials were instructed to oppose all federal subsidies to private business and any further control of co-operatives through Boards and Commissions. President Miller is also expected to discuss the troubles of dairy farmers with respect to the United States Tariff Commission and its labors.

Hon. F. P. Willits, Secretary of Agriculture, for Pennsylvania, will make an address on the subject "The Functions of a Milk Producers' Organization."

How the world's greatest dairy co-operative finds markets will be the theme of an address by George W. Slocum, President of the Dairymen's League Co-operative Association, Inc.

One of the most interesting addresses will be delivered by Harry Hartke of Covington, Kentucky, the leading spirit in the Co-operative Pure Milk Association of Cincinnati.

H. D. Allebach, president of the Inter-State Milk Producers' Association will make an address outlining the Policies and Plans of that organization.

Other speakers, each of whom is an authority on the co-operative marketing of milk and its products, will be:

N. P. Hull, President, Michigan Milk Producers' Association, Detroit, Mich.; R. W. Strong, Secretary, Ohio Farmers' Co-operative Milk Association, Cleveland, Ohio; I. W. Heaps, Secretary, Maryland State Dairymen's Association, Baltimore, Md.; J. C. Near, Secretary, Michigan Milk Producers' Association, Detroit, Mich.; W. F. Schilling, President, Twin City Milk Producers' Association, St. Paul, Minn.; W. M. Cease, Secretary, Farmers' Milk Producers' Association, Richmond, Virginia; P. S. Brenneman, President, Dairymen's Co-operative Sales Company, Pittsburgh, Pa.; C. E. Hough, General Manager, Connecticut Milk Producers' Association, Hartford Conn.; J. A. Scollard, President, United Dairy Association of Washington, Chehalis, Washington.

Headquarters will be at Hotel Statler, Detroit, Michigan.

"A feature of the Detroit Convention will be a get-together meeting of the editors of papers owned by member associations". About two-thirds of our organizations have their own journals which go directly to the members and this is a powerful means of keeping the various districts in touch with each other. The editors of these papers will hold a special session for the discussion of problems of common interest.

"The National Co-operative Milk Producers' Federation now represents nearly 300,000 organized producers of milk. Membership in the Federation, however, is held by the twenty-seven associations to which the farmers belong.

OFFICIAL NOTICE

Eighth Annual Meeting

OF THE

STOCKHOLDERS

OF THE

Inter-State Milk Producers' Assn.

Monday and Tuesday, December 1st and 2nd, 1924

At the Adelphia Hotel, 13th and Chestnut Streets, Philadelphia, Pa.

In accordance with the By-Laws, the stockholders of the Inter-State Milk Producers' Association will meet at the Adelphia Hotel, 13th and Chestnut Sts., Philadelphia, Pa., Monday, December 1st, 1924, at 10.00 A. M., for the purpose of filling vacancies in the Board of Directors and hearing reports of officers, and the transaction of such business as may be necessary.

PROPOSED PROGRAM

MONDAY, DECEMBER 1ST, 1924

10.00 A. M. { Election of Directors. Reports of Officers and Auditors. Discussion of General Market Conditions

2.00 P. M. { Address of Officers and Others. General Business Meeting.

SPECIAL ENTERTAINMENT FOR THE LADIES

See Page 4 for Full Details

ANNUAL BANQUET

Adelphia Hotel, Monday, December 1st, 1924, at 6.00 P. M.

INTERESTING PROGRAM GOOD MUSIC SPECIAL DAIRY COUNCIL PLAYS

Banquet Tickets $2.50 (Limited to 500)

TUESDAY, DECEMBER 2ND, 1924

8.00 A. M. { Visits to Local Milk Plants, Ice Cream Plants, Etc. Visit to Inter-State Milk Producers' Ass'n Offices.

10.30 A. M. { Continued Business Session. Address by Prominent Speakers.

H. D. ALLEBACH, President R. W. BALDERSTON, Secretary

IF YOU CANNOT ATTEND, SIGN, AND DETACH THE FOLLOWING PROXY AND GIVE IT TO YOUR REPRESENTATIVE, OR SEND TO THE SECRETARY OR ANY OTHER OFFICER OF THE ASSOCIATION

PROXY FOR STOCKHOLDERS

INTER-STATE MILK PRODUCERS' ASSOCIATION

INCORPORATED 1917

REGISTERED WITH

CORPORATION TRUST COMPANY OF AMERICA

WILMINGTON, DELAWARE

PROXY

STOCKHOLDERS' MEETING

Know All Men by These Presents,

That I, the undersigned, being the owner of shares of the capital stock of the corporation above named, do hereby constitute and appoint my true and lawful attorney in my name, place and stead, as my proxy, at the annual meeting of the stockholders of the said corporation to be held in the Adelphia Hotel, 13th and Chestnut Sts., Philadelphia, Pennsylvania, on the First day of December, 1924, and on such other day as the meeting may be thereafter held by adjournment or otherwise, according to the number of votes I am now or may then be entitled to cast, hereby granting the said attorney full power and authority to act for me and in my name at the said meeting or meetings, in voting for directors of the said corporation or otherwise, and in the transaction of such other business as may come before the meeting, as fully as I could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that my said attorney or substitute may do in my place, name and stead.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this day of , 1924.

Witness:.....(Seal) .....(Seal)

ENCLOSE 10 CENTS IN STAMPS WITH PROXY FOR REVENUE TAX

INTERSTATE MILK PRODUCERS REVIEW

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F. P. Willits, Managing Editor
A. A. Miller, Editor and Advertising Mgr

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Vice President, Frederick Shangle
Secretary, R. W. Balderston
Treasurer, Robert F. Brinton

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"Entered as second-class matter, June 8, 1920, at the post office at West Chester, Pennsylvania under the Act of March 3, 1879."

Editorial

Rural electric service at a reasonable rate in the State of Pennsylvania is promised the rural people if the plans of the Farmers Committee are carried out.

It is quite evident that the relation between city and rural rates must be entirely divorced in arriving at a basis of rates satisfactory to the consumers and also to the public utilities.

Well informed officials, it is said, are beginning to get this view of the situation.

The Rural Electric Committee is planning an extensive examination of conditions in rural sections, not only in Pennsylvania, but in other districts where service is supplied at rates far below present electric rates usually in effect in Pennsylvania.

Without a doubt reasonable cost and rates will result in a wide spread use of electrical power in rural communities and the proposition on the part of the committee to familiarize and acquaint the rural people with the value of electricity as a power producing medium will do much toward the greater installation of such power.

MARKET CONDITIONS

There has been little real improvement in the demand for fluid milk, particularly in the Philadelphia markets.

Local conditions in some of the smaller towns in the Philadelphia Milk Shed have been a little better. In these cases there has been no material increases in the supply and consumption has been fairly well maintained.

Some buyers report a material increase in basic milk, as compared with the same period last year, but on the whole we believe that our producers will observe proper caution, so as to maintain an average supply and keep the market from being flooded and thus enable the present price basis to be maintained.

Current spot prices for surplus fluid milk, on the leading recieving platforms in the City of Philadelphia, have, throughout the past month, been on a lower price basis than current basic milk prices.

Surplus milk, that is such milk as may be in excess of the demand for fluid consumption, can only be handled at a lower price—due principally to the current butter prices.

Butter prices, throughout the month have been fairly well maintained, but on a lower price level than a year ago. The average price of 92 score solid packed butter, New York City, for October was 38.7 cents as compared with 47.7 cents, one year ago.

Prices of butter during October have been slowly moving upward, despite increased holdings. Early in the month the market was weak at prices around 38 to 39 cents, then receding to 37.5 cents and again recovering at the close of the month, with quotations at 40.5 cents.

Holdings of butter in 26 cities on October 25th aggregated 106,084,437 pounds; as compared to 115,387,917 pounds on October 1st.

Eighth Meeting Annual

Inter-State Milk Producers' Association

HOTEL ACCOMMODATIONS

Reservations for hotel accomodations for the Annual Meeting

Monday, December 1st

May be made through the office of the association.

Send requests for reservations to

FREDERICK SHANGLE, Chairman
9th Floor Boyertown Bldg.
Philadelphia

Rooms without bath may be had at prices ranging from $2.50 to $5.00 per single room per day. Rooms with bath from $3.50 up.

When writing for rooms, designate with or without bath and price of room.

SECRETARY WALLACE DIES

Henry C. Wallace, Secretary of the Department of Agriculture, and member of the Presidents' Cabinet, died at Washington, D. C., on October 25th.

Secretary Wallace has been in poor health for some time, but his sudden death was a shock to his many friends.

Services were held in the East Room of the White House, on Monday, October 27th, after which the remains were taken to De Moines, Iowa, for burial.

Henry Cantwell Wallace was born in Rock Island, Ill., in 1866, but with his parents moved to Iowa, where he grew to manhood.

He was appointed Secretary of Agriculture by the late President Harding in 1920. Mr. Wallace was an extensive publisher of farm papers, and was well known in the dairy world of the country.

ANNUAL ELECTION OF DIRECTORS

At the annual meeting of the Inter-State Milk Producers' Association, held at the Adelphia Hotel, Philadelphia, Pa., December 1st, 1924, the terms of the following directors will have expired.

F. O. Ware, Cumberland County, New Jersey.

Frederick Shangle, Mercer County, New Jersey.

F. M. Twining, Bucks County, Penna.

J. H. Bennetch, Lebanon County, Pennsylvania.

J. A. Poorbaugh, York County, Penna.

J. B. Smith, Cumberland County, Pa.

A. R. Marvel, Talbet County, Maryland.

C. F. Preston, Chester County, Pa.

On completion of the election of the successors of the above directors, the Board of Directors will be formally organized and elect the officers of the association for the coming year.

THE ANNUAL BANQUET

Inter State Milk Producers' Association

Monday, December 1st
Six P. M.

ADELPHIA HOTEL
13th and Chestnut Streets
PHILADELPHIA

LIMITED TO FIVE HUNDRED

Application for banquet tickets will be filed in the order received
Send in your order at once

TICKETS $2.50 each

Interesting Program
Special Dairy Council Plays
Good Music and Songs

Make reservations for banquet tickets by direct application to the

Inter State Milk Producers' Association
BOYERTOWN BUILDING
Philadelphia

LADIES ENTERTAINMENT

The Executive Committee, in arranging for the annual meeting of the Association for 1924, made the following appointments on the Ladies' Hospitality Committee:

Mrs. R. W. Balderston, Chairman.
Mrs. F. Shangle
Mrs. R. F. Brinton
Mrs. H. D. Allebach
Mrs. A. B. Waddington
Mrs. F. M. Twining

Instead of the usual sight-seeing trip, the committee is planning this year to hold a meeting especially for women in the offices of the Association, 1211 Arch Street, on Monday morning, December 1st, at ten o'clock. Representatives from the Dairy Council will demonstrate their material and there will be exhibits of books and pamphlets of special value to mothers and others interested in nutrition. The Nutrition Department will furnish luncheon and the Dramatic Department is arranging special music.

The luncheon will be over in time to attend the afternoon meeting in the Adelphia.

A cordial invitation is extended to each and every women interested in the work of the Milk Producers' Association and the Dairy Council to attend these meetings. The luncheon promises to be even more pleasantly sociable than was possible in a hotel.

DIRECTORS' MEETING

The regular meeting of the Board of Directors of the Inter-State Milk Producers' Association was held at its headquarters in the Boyertown Building, Monday, October 27th.

A full quota of twenty-four directors and officers were in attendance. The Inter-State Milk Producers' Association Fieldmen and the Inspection Forces of the Quality Control Department of the Philadelphia Inter-State Dairy Council also attended the meeting.

Formal reports of the Secretary and the Treasurer were presented and approved by the Board.

H. D. Allebach, President, presented a very complete review of market conditions. He outlined the situation both from the standpoint of production as well as consumption. Production on the whole has not increased very largely and in view of such conditions, it was believed that the market might be kept on an even basis. Any marked increase in production, it was felt, would under existing conditions, embarrass the market.

The Philadelphia Selling plan will be effective in just so far as the producers use or abuse its various provisions.

C. I. Cohee, director of the Quality Control Department, of the Philadelphia Inter-State Dairy Council, explained several detailed changes in the regulation, affecting particularly the matter of delivery of mornings milk without cooling.

Reports were presented by each director, presenting an outline of conditions in their respective territories. The shortage of the corn crop and continued dry weather were features of these various reports.

Following the meetings, the Inter-State and Dairy Council field forces. together with a number of the directors were addressed on the subject of "Danish Cooperation", by R. W. Balderston.

Inter-State Field Forces Meet

On Tuesday, October 28th, the testing and field forces of the Inter-State Milk Producers' Association held a meeting in the offices of the association, for the general consideration of the plan and scope of their work.

The meeting was addressed by Fred Shangle, on the subject of Salesmanship and its application to the Inter-State Milk Producers Association work in the field.

P. E. SHARPLESS AND CO. WITHDRAWS FROM DAIRY INDUSTRY

Reports are current that P. E. Sharpless and Company, with receiving stations at Rising Sun, Md.; Concordville, Cochranville and Toughkenamon, Pennsylvania, has disposed of these various interests.

The Rising Sun plant has been sold, it is stated, to a New York City Milk Dealer, while the other plants have been disposed of, it is reported, to the Craft Cheese Company.

It is also stated that the Sharpless interests will continue its Wilmington, Delaware, retail milk and ice cream business.

They say an ear in the schack is worth three in the schock. It'll be truer this year than ever before, according to reports from the west on seed corn.

No, time isn't much to a hog, but a warm dry place in the winter is, and he'll gain faster for it.

Using milk from tuberculin tested cows is not gambling with the children's health.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions under the Philadelphia Selling Plan again became effective with January, 1924. The same provisions will apply for next year. The basic quantity of all producers operating under this plan will be made during October, November and December. This average basic quantity will represent the basic quantities of respective producers during 1925.

All milk shipped during these three months will be paid for at the basic price.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

OCTOBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

NOVEMBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test Per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37

OCTOBER BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Miles	Basic Quantity Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

NOVEMBER BASIC PRICE
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241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

OCTOBER BUTTER PRICES

	92 Score Solid Packed Phila.	New York	Chicago
1	39 1/4	38 1/2	36
2	39 1/2	39	37
3	39 3/4	39	37 1/2
4	39 3/4	39	37 1/2
6	39 1/2	38 1/2	37 1/2
7	39	38	37 1/2
8	39	38	37 1/2
9	39 1/2	38 3/4	37 1/2
10	39 3/4	39	37 1/2
11	39 3/4	39	37 1/2
13	—	—	—
14	39 3/4	39	37 1/2
15	40	39 1/4	37 3/4
16	40	39 1/2	38
17	39 1/2	39 1/2	37 1/2
18	39	38	37
20	38	37 1/2	37
21	38	37 1/4	36 1/2
22	38	37 1/2	36 1/2
23	38	37 1/2	36 1/2
24	38 1/2	38	37
25	39	38 1/2	37
27	39	38	37
28	39 1/2	39 1/2	37 1/2
29	40	40	38-38 1/2
30	41	40 1/2	38 1/2
31	41	40 1/2	38 3/4

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.

RURAL ELECTRIC COMMITTEE PENNSYLVANIA STATE COUNCIL OF AGRICULTURAL ASSOCIATIONS

Origin. For several years there has been a growing demand among the rural population of Pennsylvania for electric service. Usually requests for service have been met by exorbitant demands on the part of the utilities that the consumer shall finance the line, and pay high rates with a large minimum charge. The result has been that only about 13,000 farms in Pennsylvania have central station electric service.

The investigations of the Giant Power Survey Board have brought to light the fact that rural committees elsewhere are obtaining service at one half to one third of the rates in Pennsylvania. The Public Service Commission in June, 1924, instituted an investigation into rural electric service in Pennsylvania. Immediately the State Council of Agricultural Associations appointed the Rural Electric Committee to represent the interests of the farm and village people in this investigation.

Purpose. The purpose of the Committee is to obtain adequate electric service at reasonable rates for the rural population of Pennsylvania. It is cooperating in every way possible with the Public Service Commission in solving the problem of how to get cheap electricity to the farms and villages of the state. If the investigation is actively pushed we feel justified in believing that within a reasonable time electric service will be made available at rates within the reach of people in a large part of the rural districts of the State.

If successful we shall not only relieve both men and women of the drudgery of the heavy work formerly done by hand on every farm but will also effect savings of millions of dollars in our light and power bills, and decrease our fire risks, and greatly increase the market value of our real estate.

To accomplish its purpose the committee needs at least $10,000 immediately—a surprisingly small sum when compared with the results that can be obtained.

Will you help?

RURAL ELECTRIC COMMITTEE

Morris T. Phillips, Chairman
John A. McSparran
P. S. Brenneman
John G. Miller
H. D. Allebach
Fred Brenckman

Mail attached subscription blank to H. D. Allebach, Treasurer, Boyertown Bldg., Philadelphia, Pennsylvania.

I will contribute $..... toward the work of the Rural Electric Committee of the State Council of Agricultural Organizations in obtaining adequate electric service at reasonable rates for the rural population of Pennsylvania.

$..... enclosed.

$.....will be sent.

.....
(Date)

(Name) .....

(Address) .....

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations
1924

	Average per month Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.58
May	1.82	1.51
June	1.95	1.62
July	1.91	—
August	1.81	—
September	1.79	—

QUALITY CONTROL WORK IN PHILADELPHIA MILK SHED

C. I. COHEE

The quality of the dairy products which they are offering for sale is of the greatest importance to the milk distributors and manufacturers of dairy products. Unfortunately, producers have not at all times been as keenly interested in the quality of the product as has the distributor, largely because they have not come in direct contact with the demands of the market and do not realize the importance of quality from the marketing standpoint.

If we stop and consider why milk and dairy products are used we will find that they are used chiefly because consumers like them. A survey recently made in the Philadelphia market by the Bureau of Markets of the United States Department of Agriculture disclosed the fact that when the question was asked of the housewife as to why they and the members of their family used milk, the answer in the majority of cases was "because we like it," indicating that the appeal to the palate was the biggest consideration on the part of the consumer as a reason for using milk. Next to the reason given of liking it, came the answer that it was "healthy." The big job of the Dairy Council is to convince the public in general that they should use milk and dairy products because of their health promoting value.

A comparison of the consumption of milk in various small cities within the Philadelphia Milk Shed very conclusively demonstrates that those cities which have the most satisfactory milk supply also rank highest in the consumption per capita, while the cities having an inferior grade of milk were the lowest. This again would bear out the statement that people use milk because they like it and appreciate good quality by correspondingly increasing their consumption.

It is generally recognized that some form of supervision that deals with the product and the production of that product as well as the distrubution, is necessary. What form of supervision is best fitted to bring the desired results depends upon local conditions to a very great extent. In some sections the dealer or manufacturer himself is responsible for the quality of his product from the cow to the consumer, having no help in working with his producer from outside sources whatsoever. In other sections the local boards of health take an active interest in the quality of the dairy products being offered to the consumers within their jurisdiction and in many cases have laid down very strict regulations for the production, care and handling of milk. Contrary to the opinion of the average dairy farmer, Board of Health regulations have usually resulted in a benefit to the producer, not only because of the better product reaching the market as a result of their efforts, but also from the standpoint of preventing unfair competition from unscrupulous dealers who do not safeguard their milk supply as carefully as the better class of dealers among their competitors do.

If the interest and co-operation of the producer can be aroused in his milk marketing problems, so that he himself recognizes the importance of quality in his product, in my opinion, much greater results can be obtained than by any other means now in use. It is one thing to lay down requirements which the farmer must meet and have him meet them while the inspector is on his premises. It is another thing to have requirements which the farmer will voluntarily meet every day in the year, whether someone is watching him or not.

The Philadelphia Milk Shed has a program for milk improvement which includes regulations fully as exacting as those in the average city. These regulations were adopted by the producers themselves. We have the advantage of a minimum standard of practice that is supported by public opinion among the producers. This has the advantage of not only establishing a standard which the producer is expected to live up to but also of having a standard which his neighbor is living up to and where the neighbor is interested in seeing that his fellow producers around him also maintain. In other words, in the Philadelphia district the farmers are awake to the importance of the quality of their product and are not willing to see their markets affected by a careless producer who is not as interested in the quality of the products as he should be.

Meetings with speakers to talk on the production of clean milk and the importance of better quality of milk from the marketing standpoint, have done their part toward educating public opinion among the producers to more advanced steps. In the Philadelphia district 165 such meetings were held in one year with an attendance of 25,173 producers who came out to the meetings because they were interested in the program to improve the milk supply.

The Philadelphia regulations provide for a milk house—milk house to contain suitable equipment for properly cooling and caring for the milk. They provide further for certain standards within the barn itself, such as tight floors and gutters, tight ceilings, adequate lighting, proper ventilation and cleanliness. Every dairy barn must be either plastered, painted or whitewashed, and if whitewashed, must be done at frequent intervals so as to maintain a sweet, clean stable. They also provide that milking must be done in sanitary pails of the partly covered top type. They provide for the cleanliness of the animal, for the care of cans and utensils on the farm and the care of the milk in transit. They provide further for the handling of milk in country stations and city distribution plants. They also provide that the buyer washes and returns clean all cans to the producers. This one point has been a big factor in improving our milk supply. Minimum standards and methods are prescribed for the handling of the milk from the time it leaves the cow until it reaches the consumer.

The greatest difference between the type of work that we are doing and that done by city and state authorities is that we are teachers while they are police. We are teaching the methods that we want pursued instead of laying down laws with which the farmer must comply. While we are teachers and do not take the attitude that you must do certain things or quit, we do, however, have the power to enforce the regulations and do invoke that power whenever necessary.

The question naturally arises in your mind as to where we obtain any power to enforce compliance in regulation such as we have. This comes through co-operation with the dealer in the Philadelphia district. The majority of the dealers will not purchase milk from producers who do not hold a permit issued by the Dairy Council, so that approximately 85% to 90% of all the milk sold in Philadelphia comes under the supervision of the Dairy Council. When a producer cannot be persuaded to co-operate in improving his milk supply, the dealer is advised and immediately stops receiving milk from that producer and his temporary permit is revoked.

Becoming effective the past June first, visits to farms have already disclosed about 2,000 new milk houses constructed on farms at this time. How many additional milk houses have been built by farmers, it is impossible for me to say until the first farm visits after the regulations became effective shall have been completed. The work has been very materially aided in the Philadelphia district by the local units of the Inter-State Milk Producers' Association and by the active support of the county agents throughout the districts who, from the very start, gathered in our office from the four states comprising the Philadelphia Milk Shed and assured us of their support and assistance. I do know, however, that is has brought very beneficial results in the Philadelphia district and has brought beneficial results to the producer, not only from the standpoint of maintaining a satisfactory market for his product, but also in preventing losses from sour milk and milk rejected from other causes. As one of the receiving station operators, questioned during one very hot day in August just past, put it, the improvement can be noted in many ways. "Last year at this time" he said, "we were turning down on the average of four to five thousand pounds of milk daily because of high acidity and lack of proper cooling. This year we have seldom had ever one or two cans of milk daily, even in the hottest weather, that is rejected for this cause."

(Address by C. I. Cohee, at the National Dairy Council meeting, Milwaukee, Wisconsin.)

DEPARTMENT GATHERING NEW DATA ON PUREBRED LIVESTOCK

To obtain practical information on a number of questions on livestock improvement, the Bureau of Animal Industry is conducting a questionnaire investigation. Subjects covered by a series of questions on blanks which are being mailed to 5,000 stockmen include the cost of raising purebreds as compared with common stock, the marketing of purebred stock as meat animals, and several questions relating to registration of purebred livestock. A number of other topics on which information is lacking or is fragmentary are included.

The results of the questionnaire, department livestock specialists believe, will be of interest and value to the entire industry.

The development of the "Better sires—better stock" campaign, conducted by various States and the department, has resulted in a large list of livestock owners who are especially qualified to discuss methods of livestock improvement.

FLAVOR AND ODOR OF MILK AND CREAM

At this particular time of the year cows are usually given a change in feed. They are apt to be placed upon pasture or given some early succulent feed. Such feed often causes a decidedly unpleasant flavor and odor in the milk from such cows.

Experiments pertaining to the effect of feeding certain feeds upon the flavor and odor of milk are reported in Department Bulletins Nos. 1097, 1190 and 1208. These bulletins report the effect of feeding green alfalfa, green corn, turnips, or silage, upon the flavor and odor of milk. The conclusions reached in all cases are quite similar.

The feeding of these feeds before milking is apt to impart a pronounced flavor and odor to the milk.

The longer the time elapsing between feeding and milking, the less pronounced will be the off flavors and odors resulting from these feeds.

Feeding immediately after milking has little or no detrimental effect upon the flavor and odor of milk.

When green alfalfa is used as pasture, the cows should be removed at least four or five hours before milking.

Prompt and proper aeration of the milk will remove slight off flavors and odors and will lessen the intensity of strong flavors and odors.

With these facts in mind the milk inspectors may be of great service to producers and consumers. Those inspectors, coming in personal contact with the producers, can advise as to the time of feeding and as to the necessity of prompt and careful aeration and cooling. The consumer when served with "grassy" milk oftentimes complains and in some cases suspects the milk of being harmful. Inspectors in such cases should be able to explain the reason for such flavors and allay any fears in the mind of the consumer.

By advising both producers and consumers as to the cause of poor flavored milk and helping to overcome this condition, inspectors are in a position to carry on valuable constructive work. Such constructive work is essential to efficient and lasting milk inspection.

GUERNSEY STATE CHAMPIONS IN TWO YEAR OLD CLASSES

S. R. Matlack, Medford, New Jersey, is the owner of two young Guernsey cows that have become the new state champions of New Jersey in two of the two year old classes of the Guernsey Advanced Register.

One of them, Cady's Jewell 120524, was run in double letter class,—that is, she carried a calf for at least 265 days of the test year. Her completed record reveals a production of 11,927.5 pounds of milk and 564.49 pounds of butter fat, thus making her state champion in class GG.

The other, Dot of Medford 121341, has made her record in the triple letter class, or the Farmers' Division. This class is limited to twice daily milking, and the test runs for ten months only, at the end of which time the cow must drop a living calf. This young cow produced 6,389.4 pounds of milk or 330.18 pounds of butter fat, thus becoming the New Jersey state champion in class GGG.

Both of these cows were bred by Tennant and Broadshaw, of Slippery Rock, Pennsylvania.

GLEANINGS FROM THE FIELD

ORGANIZATION IN BEDFORD CO.

A short membership drive was conducted in Bedford Co., Pa., pratically all of the work centering around the New Enter-prize local. About 30 new members were signed up, all shipping to a single receiving station. The total in cows was 240, making an average herd of 8 cows.

This dairy section is on the extreme Northwestern edge of the Philadelphia Milk Shed and is a typical "Border" dairy section except that the cities of Altoona and Johnstown draw much of their fluid milk from the territory.

With the application of more far-seeing marketing policies, particularly along quality lines, dairying is becoming a dependable and profitable farm enterprise. There is a decided feeling among the dairymen that milk of late has brought them the best returns of any of their farm products. The inclination to co-operate in the building of a dependable and protected market through organization is widespread. This is shown by the proportion of farmers who aligned themselves with the Inter-State Milk Producers' Association. Here, as in other territories about 8 out of 10 men interviewed join immediately.

HAGERSTOWN WORK PLANNED

A drive for members will start in Washington county, Md., shortly after November 1st. It is planned to further consolidate the organization in that section by following up the start made last year, and give every dairyman in that section an opportunity for joining the Inter-State.

A meeting of county local officers will be held Wednesday evening, October 29th, and the drive will swing into action shortly after that time. We should like to appeal to our members in this section, through the "Review", to give all the co-operation they can to help line up their community and their county on the side of co-operative marketing. Your individual efforts can be of great assistance. A good word spoken to your neighbor or attendance at such meetings as may be held will be appreciated. We expect Washington county, in its second year of organization to respond with a good, healthy 80 per cent. membership and representation at the annual meeting.

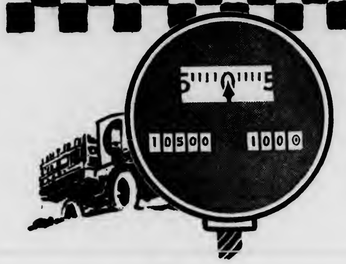
MEMBERSHIP WORK IN WESTERN TERRITORY

A meeting held at McAlery's Fort, Pa., Huntingdon county concluded the field organization work in that section. The meeting was held at the Fort schoolhouse Friday evening, September 26th, and was well attended.

Mr. Clark, Huntingdon county agent, gave a short talk on Huntingdon county dairying and Mr. Cook of the Inter-State Milk Producers Association followed him with a discussion of market conditions in this territory.

The total new active membership obtained in this work in Mifflin and Huntingdon counties was about 60, with most herds ranging from 8 to 10 cows. As reported last month the proportion of dairymen joining was in the neighborhood of 80 per cent. of those called upon.

Clover and alafalfa are more promising nitrogen factories than Muscle Shoals.

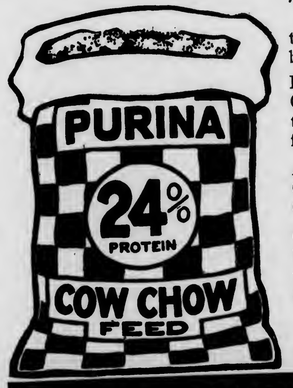


If—
How many miles on a gallon of gas?

Why not—
How many gallons of milk on a dollar's worth of feed?

Make these your Feed Dollar Speedometer

Know what You are getting for every Dollar's worth of Feed



THE only way that the thousands of Checkerboard feed dealers are selling Purina Cow Chow—and the only way they *want* to sell Cow Chow—is on the basis of the *results it brings to dairymen.*

Purina Mills and all Purina Dealers urge every feeder of Cow Chow to use milk scales and milk record sheets—to *know* their cost of producing milk. Purina dealers furnish the record sheets *free,* and the scales at *cost.*

Ask yourself this question: Could the sales of Purina Cow Chow have increased so rapidly when sold on this basis, if Cow Chow did not *lower the cost of producing milk.*

Get a record blank and milk scales from your Checkerboard feed dealer today and start at your next milking to keep records of your milk production and feed cost. See for *yourself* what Cow Chow will do for you.

PURINA MILLS, 854 Gratiot Street, Saint Louis, Missouri
Seven Busy Mills Located for Service

Write for the 100-page Purina Cow Book—FREE

COW CHOW CALF CHOW

An increase of 6 per cent in the number of milk cows two years old and over, on farms in the United States for the year ended June 1, 1924, is indicated by the milk cow survey of the United States Department of Agriculture, which was made by the rural mail carriers, covering 121,000 farms. The Bureau of the Census in 1920 enumerated 23,724,148 dairy cows and heifers over one year of age on farms. For the period January 1, 1920, to January 1, 1924, the Department of Agriculture has estimated a 4 per cent increase in milk cows.

SPECIAL DAIRY HERD SURVEY

This is the first survey relating to milk cows which has been made by rural carriers, so that similar comparisons for previous years are not available. The survey also included inquiries as to the number of heifers between one and two years of age, and heifer calves under one year of age being raised for milk cows, and indicated for the farms covered that there were 24.6 per cent as many heifers between one and two years of age as there were dairy cows, and 21.8 per cent as many heifer calves.

The census of 1920, which was taken as of January 1, 1920, showed 20.6 per cent as many dairy heifers one to two years of age, as dairy cows, while the present survey shows 24.6 per cent as many heifers, which would indicate a tendency either to increase the herds during the coming year more rapidly than was the case four years ago.

DAIRY COUNCIL SERVICE

The various departments of the Philadelphia Inter-State Dairy Council

Is Yours for the Asking Without Cost

Arrangements may be made, subject to previous engagements, for lecturers and speakers on Health and Nutrition Topics.

MOTION PICTURE FILMS ON DAIRYING SUBJECTS

PLAYS FOR THE CHILDREN

LANTERN SLIDES, LITERATURE, POSTERS, ETC.

The Dairy Council has carried the message of "Milk for Health" to thousands of consumers and producers. Why not include those in your community?

There is no charge for this service for local I. M. Pa. Meetings, Community or Local Meeting in the Philadelphia Milk Shed

Let Us Plan Your Entertainment

Write for detailed information

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

NOTICE

Presidents and Secretaries of Inter-State Milk Producers' Association Locals

The following announcement has been sent to Presidents and Secretaries of the local organizations of the Inter-State Milk Producers' Association, advising them definitely as to plans for representation at the coming annual meeting of the association.

Our annual meeting is again approaching fast. We have records on our minutes that the delegates to the last annual meeting voted in favor of again paying the carfare of the delegates to this annual meeting, which will be held on December 1st, 1924, starting at ten o'clock in the morning and lasting through that day with a banquet in the evening and visiting the milk plants the next morning and then closing with a short session. This motion includes that we pay only the care fare of a delegate from a local that has twenty-five (25) active members or more. Those locals which have less than twenty-five (25) members will be allowed to send a delegate at their own expense.

With this motion before us it will again be necessary for your local to hold a meeting to elect a delegate to attend this annual meeting and to bring with him the proxies of the members of each local. We will mail to you separately a lot of proxies, which you can have the members sign. These will give your delegate power to cast the votes of your members for directors. There are eight of the present board whose term expires this year. They will either have to be re-elected or some one else elected in their places.

In arranging local meetings, if you want someone to attend same from this office, I would advise you to get in touch with your County Agent and have him help you to arrange them, so you can have them all in one county during the same week, providing you want someone from our office to attend these meetings. If you are willing to have the meetings without anyone from the central office attending them, then you can hold them whenever it suits you. However, if you want someone from this office, you will have to give us at least ten (10) days notice, so we can tell you whether anyone can attend or not. We have now seven fieldmen and two or three men available here in the office whom we may use this fall in going to these meetings, if required.

Proxies should, as far as possible, be presented by the delegates in person, on the morning in the Hotel Adelphia headquarters where clerks will be present to check the same.

The annual banquet will be held on Monday evening, December 1st. The seating capacity will be limited to five hundred. Get your tickets at once. Requests for tickets will be filled in the order received.

FARM LEGISLATION IN PENNSYLVANIA

The legislature of Pennsylvania at its last session appointed an agricultural commission to investigate the present situation of agriculture throughout the state and report back to the next session. This commission of three Senators and five members of the House, with Senator Shontz of Lehigh County as chairman, has held several hearings at prominent points throughout the State so as to get information from the farmers themselves as to what they felt were the needs of the Pennsylvania farmers. At a hearing held at Allentown, September 30th, I. R. Zollers represented the Inter-State Milk Producers' Association and at the session at West Chester, Robert F. Brinton, treasurer, and Robert W. Balderston, secretary, represented the organization. It was evident at both hearings that there is not a complete agreement among our farmers as to what should be done to improve agricultural conditions.

Many feel that there should be some revision of taxes so as to equalize more nearly those paid by farmers as compared with other taxable interests. It was evident that all our farmers are heartily in favor of increased facilities for obtaining electric light and power.

Our attention was called to the importance of proper support by the legislature for the tuberculosis eradication program of the State Department of Agriculture.

The commission was reminded that many of the difficulties confronting our farmers at the present time are economic and cannot be improved directly through legislation. The commission was asked to urge the support of agricultural education, particularly at State College and in our local vocational schools.

RECORD QUANTITY OF BUTTER IN COLD STORAGE

More butter was being held in Pennsylvania's cold storage warehouses on October 1, 1924 than at any previous time since the State Cold Storage Law was passed in 1913, according to the quarterly report of Director James Foust, State Bureau of Foods and Chemistry. A Federal report on the same date showed 156,232,000 pounds of butter in cold storage in the United States as compared with 102,731,000 last year. This amount is about one-half pound more per person than a year ago.

In Pennsylvania, the amount is 13,545,000 pounds as compared with 8,572,000 pounds last year. This total amount is a little over one and a half pounds per person in the State. The butter in storage, however, is 2,600,000 greater than in 1917 when the highest previous record was established. The figures showing the amount of butter in cold storage on October 1 of each year since 1915 are as follows:

	Butter (lbs.)
1915	9,744,913
1916	9,555,966
1917	10,923,322
1918	6,842,421
1919	7,390,839
1920	9,233,607
1921	5,821,323
1922	5,382,033
1923	8,572,010
1924	13,545,271

Tentative Program of the
EIGHTH ANNUAL MEETING
INTER-STATE MILK PRODUCERS' ASSOCIATION
Adelphia Hotel, Philadelphia.
DECEMBER, 1st and 2nd

Monday Morning — Executive Session

10.00 A. M.—Call to order
Election of Directors
Reports of the Secretary
Reports of the Treasurer
Report of the Certified Accountant
Appointments of Committees
Introduction of Resolutions
New Business

(At the same time there will be a special meeting for the ladies at the offices of the Association, 1211 Arch Street. The program will consist of a demonstration of the Philadelphia Inter-State Dairy Council activities, followed by a luncheon served by the Dairy Council staff. A guide will be provided to direct to the offices, those who come to the hotel first.)

Afternoon Session

2.00 P. M.—Annual report of President H. D. Allebach

2.30 P. M.—Address, "Co-operative Milk Marketing in Connecticut." C. E. Hough, Secretary Connecticut Milk Producers' Association.

3.00 P. M.—Annual Report of Philadelphia Inter-State Dairy Council, R. W. Balderston, Secretary.

4.00 P. M.—Reports of Committees.
ADJOURNMENT
Annual Banquet
HOTEL ADELPHIA
6.00 P. M.

Tuesday, December 2nd, 1924
Public Session to which all those interested in the subject of milk are cordially invited.

8.00 A. M.—Personally conducted visits to local milk distributing and ice cream manufacturing plants.
Register at Information Bureau, Roof Garden, Adelphia Hotel, on Monday, December 1st, to make up parties to visit various plants.

10.30 A. M.—Address, "The Institute of Co-operation."
Charles W. Holman, Secretary of the National Co-operative Milk Producers' Federation, Washington, D. C.

10.45 A. M.—Address, "Milk Marketing Organizations and Tuberculosis Eradication."
W. S. Wise, Meadville, Pennsylvania, formerly member of Board of Directors, Dairymens' Co-operative Sales Company, Pittsburgh, Pennsylvania.

11.45 A. M.—Address, "Philadelphia's Milk Supply."
Wilmer Krusen, M. D., Director of Health, City of Philadelphia.

11.45 A. M.—Address, "The Farmers' Part."
Joseph A. Turner, Manager of Hollins College, Hollins, Virginia.

The offices of the Inter-State Dairy Council, in the Boyertown Building at 1211-1213 Arch Street, will be open to all visitors during Tuesday afternoon. All who are attending the meeting are urged to remain over and become acquainted with the various departments of both organizations.

PROFITS! RECORDS!
From Grade Cows or Pure-breds

It's a feather in the cap of any dairyman to own a champion cow in any breed or class.

But no dairyman can afford at any time to take his eyes off profits. When all is said and done, the value of a dairy cow depends on her ability to earn money for her owner.

Right feeding is the biggest single factor in this business of getting from a cow all that she is capable of producing.

To make money from milk you must use a feed that builds and maintains health and condition—that brings cows quickly to peak production and keeps them there.

Larro does this. Larro has many splendid milk records to its credit; but it is more significant that dairymen who use Larro consistently also produce milk profitably.

This can be done with grade cows or pure-breds alike.

There is a grade cow on the Larro Research Farm that in two years increased her milk yield from 5,851.2 lbs. to 13,157.1 lbs. for corresponding 270-day periods. There is another grade cow in the same herd that produced 13,646.4 lbs. milk the past year—yielding 3.2 lbs. of milk for every lb. of grain she ate.

Take Sadie, champion grade cow of the South, who produced 23,245 lbs. milk and 1,144.9 lbs. butter in a year. She is Larro-fed. Or, among pure-breds, the Meadowbrook herd of Jerseys at Jeanette, Pa.—a herd of 50 cows fed no grain but Larro—which holds 45 Register of Merit records and is lead by Prince's Rose of Meadowbrook, with14,292 lbs. milk and 639.5 lbs. of butter fat—a state record.

Production like that is profitable—whether it comes from grade cows or pure-breds—whether the cow ever sets a record or not.

You are milking cows to make money. They'll make the most money on Larro.

Order now from your nearest dealer.

THE LARROWE MILLING COMPANY, DETROIT, MICH.

Larro

THE SAFE RATION FOR DAIRY COWS (639)

THE LARROWE MILLING CO. DETROIT, MICH. U.S.A. Larro

WORLD WIDE SHIFTS IN DAIRY INDUSTRY

Far-reaching changes in the world dairy industry in recent years are vitally affecting the volume and course of international trade in dairy products, and directly or indirectly exerting an influence upon American markets, declares the United States Department of Agriculture in a special review of the situation.

The foreign butter market just now is exerting a strengthening influence upon the market in this country. On the other hand, it is pointed out, the prospect of increased supplies from New Zealand, Australia, and Argentina during the season now beginning, together with continued recovery of the dairy industry in Europe during the coming year may make it possible for British markets to find such ample supplies as to react unfavorably upon the butter market in the United States.

Foreign production is the heaviest it has ever been, but recently renewed purchases by Germany of large quantities of foreign butter and seasonal scarcity of imported supplies in Great Britain have combined to prevent what seemed otherwise to be an inevitable price decline.

Dairy production has been increasing in recent years in virtually all countries the world over, due to the general profitableness of dairying as compared with other farm enterprises. The general depression in the European margarine industry gives added evidence of heavy world production of butter.

The most recent growth in dairying has taken place in the comparatively new and unexploited countries, including New Zealand, Australia, and Argentina, and there is every reason to believe, says the department, that this expansion is of a substantial and permanent nature.

Russia before the war was second only to Denmark as an exporter of butter, with 150,000,000 pounds annually. The war cut off this surplus. The European butter trade is now about back to prewar volume with the former Russian supply replaced by butter from these other and newer producing countries.

Dairymen feel that production will continue to increase throughout the world and that more consideration will have to be given the demand side of the situation.

CONSUMERS DEMAND FOR MILK IN PHILADELPHIA

(Continued from page 1)

and as such, beneficial to all ages, it is probable that the amount consumed by older people will increase.

REASONS FOR DRINKING MILK.

People appparently drink milk because it is a pleasing beverage rather than because it is good for them or because they consider it a food which can be used to good advantage as a substitute for other and more expensive foods. "Like it" constituted 55 per cent. of the reasons for drinking milk, whereas health and food value made up 27 per cent. of the reasons. The remainder drank it because they were required either by their parents or by the doctor. It should be noted that "like it" was the easiest and more natural answer and it is possible that in some cases there was a deeper reason than merely a question of taste but which could not be obtained by the interviewer without suggesting an answer. This assumption is strengthened by the fact that the percentage of those replying to the mail questionnaire who said that they drank milk because of food-value and health was larger than the percentage replying that they drank it because they liked it. Those filling out the mail questionnaires had more time for thought and consultation with other members of the family than was the case with those interviewed personally.

REASONS FOR NOT DRINKING MILK.

Taste is the primary factor influencing people against the use of milk. Forty-nine per cent. of the reasons advanced for not drinking milk were to the effect that people did not like it. Preference for coffee, tea, etc., was the next most common reply. This is another illustration of the statement made above that people consider milk only as a beverage competing with other drinks.

"Do not need it" constituted 11 per cent. of the reasons for not drinking milk. This implies that, by some, milk is considered as a sort of medicine to be taken only in case of illness or poor health. This impression may be the indirect result of past advertising tending to show the value of milk as a food for invalids and as a general body builder.

That four per cent. of the reasons for not drinking milk were to the effect that it was too high priced suggests that there is not a thorough understanding by all of the comparative nutritive values of milk and other articles of diet. "A quart of milk is equal in food value to eight eggs. With milk at 12c per quart and eggs at 60c per dozen, the consumer pays 3.3 times as much for the same food value when buying eggs as when buying milk. With round steak at 37c per pound the consumer pays 2.3 times as much for the same food value as found in a quart of milk at 12c." (Bulletin No. 267, U. S. Department of Agriculture, P. 63).

Thirteen per cent. did not drink milk because it was considered fat producing, and slightly over 5 per cent. did not drink it because it did not agree with them.

Results of the mail questionnaires give the reasons for not drinking milk the same relative importance as above, the majority saying that they did not drink milk because they did not like it and the next highest number saying that they preferred coffee and tea.

FACTORS WHICH MIGHT EFFECT INCREASED MILK CONSUMPTION.

It is natural and apparent that an increase in the size of the family or an increase in the amount of cooking in general would cause an increased consumption of milk just as either of these things would cause an increased use of bread, meat or other staples. Leaving these two factors out of consideration, therefore, only 17 per cent. of those interviewed could think of a reason which might cause them to increase their milk consumption. Two-thirds of these persons, or about 11 per cent., replied that they would use more milk if the price were lower.

Slightly over 3 per cent. replied that more milk would be consumed in case of sickness.

It is a commendation of the dealers of Philadelphia that only one person in a hundred complained about the quality of the milk which was being served.

Changing seasons did not effect the amount of milk consumed daily in the cases of over 77 per cent. of the families interviewed.

Twelve per cent. of the families used more milk in cold weather principally because of an increased amount of cooking. In summer, fruits in various forms and ice cream are used a great deal as desserts and in winter their place is taken by puddings and other desserts requiring the use of milk in their preparation. Gravies and white sauces of various kinds requiring the use of milk are also more generally used in winter than summer.

Ten per cent. used more milk in summer than in winter principally for drinking purposes as a substitute for coffee, tea and other hot drinks. No great fluctuation between seasons seems to exist in the amount of milk used by families. City consumption figures vary by seasons but it appears from the data secured directly from housewives that this change must be due to such factors as summer migration, increased use by soda fountains, changes in hotel and restaurant consumption and ice cream manufacture rather than to any changes in consumption within the family itself.

PERCENTAGE OF TOTAL FOOD BILL SPENT ON FRESH MILK.

Data secured from 240 housewives indicate that 8 per cent. of the food bill was used to purchase milk. Milk is of more importance to Jewish families than to those of any other group as this group spent 10.3 per cent. of its food budget for milk. Poor and Italian families used less milk and spent a smaller percentage for milk than families of other groups. The wealthy families used more milk than any other group, but spent a smaller percentage of its budget for milk than either the well-to-do or Jewish groups. This is explained by a greater expenditure for all type of food by the wealthy.

Answers from 141 mail questionnaires indicate that fresh vegetables and meat are considered the foods of greatest importance, with bread next and milk fourth. The housewife was asked on the questionnaire to list the five most important foods in her household in the order of importance. The food mentioned first was given a weighting of five, the second a weighting of four and so on with the fifth a weighting of one. (See page 1).

USE OF CREAM, BUTTERMILK AND SKIMMED MILK.

Four hundred families were using 237 pints of cream per week, a weekly consumption of .59 pints per family and .13 pints per capita. An interesting item is the fact that the Jewish group used .14 pints of cream per capita, a higher figure than that of any other group, except the wealthy group, which consumed .52 pints per capita.

Four hundred families were found to be using 303 pints of buttermilk per week. This was a weekly consumption of .76 pints per family and .16 pints per capita. The colored group were by far the largest consumers of this commodity, this group consuming .56 pints per capita or more than twice as much as any other group.

An interesting feature brought out was that not one of the four hundred families was using any skimmed milk.

CONSUMPTION OF BUTTER, BUTTER SUBSTITUTES AND CHEESE.

Four hundred families were using 825 pounds of butter per week, a per-family consumption of slightly over two pounds and a per capita consumption of .44 pounds per week. Total consumption of butter substitutes was 20 pounds per week, a per family consumption of .05 pounds and a per capita consumption of .01 pounds per week. This latter was, in almost all cases, used for cooking purposes.

The survey shows that, in common with the rest of the United States, Philadelphia people are not users of cheese, except the Italian group.

KNOWLEDGE OF PRICE COMPARISONS BETWEEN CITIES.

Milk is consistently cheaper to the consumer in Philadelphia than in most other large cities. Distributors were interested in finding out if the consumers realized this fact. Only twenty-three of the four hundred housewives interviewed knew that milk was cheaper in Philadelphia. None of the Italian group knew it and only one each in the colored and suburban groups.

MILK PUBLICITY IN PHILADELPHIA.

Advertising of milk was studied by asking the consumers a number of questions about milk publicity which they had heard or seen; such as, work of the Philadelphia Inter-State Dairy Council, bill boards, newspaper advertising of the dealers, booklets, etc.

Several questions dealing with different phases of advertising were asked in the questionnaire. "Where and how have you heard or seen the use of fresh milk advocated? In schools? In other places?" Answers to this question were classified under lectures, leaflets, plays, stories and cooking demonstrations. Out of a total of 400 women interviewed, 77 remembered something along this line. Women frequently mentioned several different sources and all were noted by the interviewer and tabulated without weighting. The question was designed to test the work of the Philadelphia Inter-State Dairy Council done in the schools, in the homes, in supper clubs, and many other places. The answers to this question indicate that two-thirds of this information reached the housewife through the schools. The remainder came through other channels, which consisted mainly of the Philadelphia Inter-State Dairy Council, insurance companies, doctors and magazines.

The wealthy class, however, received most of their information from "other places." This class interviewed doctors quite frequently, especially regarding the health of their children, according to the report of several wealthy women interviewed. Lectures were mentioned 49 times and it is interesting to note that lectures were mentioned much more frequently than leaflets, the former being twice the latter, both in the case of schools and "other places." Eleven women remembered having seen leaflets which reached them through schools while 8 women had seen leaflets which reached them from "other places." Fourteen of the 15 plays remembered and 3 of the 4 stories remembered came through schools. Three cooking demonstrations in schools were mentioned and 4 in "other places." Fifty-six per cent. of this information reached the housewife directly and 44 per cent. reached her through some other member of the family. In light of the above statements, it is evident that the nutrition and health work which has been conducted in the Philadelphia schools is getting home to the mothers.

PLACES WHERE ADVERTISING HAS BEEN SEEN.

In answer to the question, "Where have you seen fresh milk advertised?" 46 per cent. of those interviewed remembered some form of advertising.

"Newspapers" was the most frequent answers. "Dealers' wagons" was next, "Billboards" came third and "Street car ads" was fourth.

The consumers were asked what they remembered most about the advertisements they had seen. Food value was found to be the feature most often remembered. Quality came second and cleanliness was third. This shows the kind of advertising which has been featured in Philadelphia in recent years and the future of its appeal to the public.

FEATURES SUGGESTED FOR ADVERTISING.

An attempt was made to find out what particular features of milk influenced the consumer most in his use of this food. Accordingly the question was asked, "What special features do you think should be advertised?"

Food value ranked first in the mind of the consumer as an argument in favor of using milk, quality ranked second and cleanliness third, showing that the efforts of the Philadelphia Inter-State Dairy Council, the Inter-State Milk Producers' Association and the Philadelphia dealers to improve both the food value and quality of the Philadelphia milk supply is being appreciated by the consumer.

RANKING OF MILK ADVERTISEMENTS

Seven kinds of milk publicity, distributed by the Philadelphia Inter-State Dairy Council were shown to fifty men, fifty women and fifty children to find out what sort of publicity message appealed to them most.

The poster which was given first rank was the one entitled "Mothers It's Up to You," with which most of our readers are familiar and which has been used by the Philadelphia Inter-State Dairy Coun-

(Continued on page 12)

UNIVERSITY OF MARYLAND SHORT COURSES

The University of Maryland announces The Third Annual Short Course in Dairy Husbandry.

1. Testing milk and cream (one week), December 29th to January 3, 1925.
2. Dairy Production (4 weeks), January 5th to 31st, 1925.
3. Dairy Manufacture (4 weeks), January 5th to 31st, 1925.

The purpose of the first course is to supply with milk and cream testers for milk plants, creameries and Cow Testing Associations.

The Dairy Product Course will be of value to farm boys interested in care, feeding and management of dairy cows, who do not have the time to attend the four year courses.

The Dairy Manufacturing course is planned to assist the workers in milk plants, receiving stations and creameries to better understand the necessity for the production of increased quality in manufactured dairy products.

The subject matter in all the courses is entirely practical, consisting of laboratory work in the testing and manufacturing laboratories and with the herd, supplemented by lectures.

In the Babcock testing course, the history, volume and value of dairy products are taken up as well as the study of the secretion of milk, the composition of milk, cream, condensed evaporated milks and powders, the proper sampling of dairy products, and their accurate testing.

The requirements for entrance are that the applicants be at least 18 years of age and have a good common school education. No entrance examination is required. Persons having practical experience on the farm or who are working in milk receiving stations or milk plants should derive the greatest benefit from these courses.

No tuition is charged to residents of Maryland. A fee of $5.00 to cover cost of materials supplied in each course for the various laboratories is assessed.

Room and board may be had in private families for from $10 to $12 per week.

Facilities make it necessary to limit the number possible to take the course, therefore, it is very necessary if you desire to take the course that you make application at once either to the County Agent or Dairy Husbandry Department, University of Maryland, College Park, Maryland.

THE POWER OF MILK

Milk has energy and power that until a recent date it was not generally known it possessed. A demonstration in Chicago, however, proved these facts beyond a doubt, for a locomotive, using dried milk as fuel, pulled five passenger coaches a distance of twenty miles. More than 200 passengers were in the cars. The demonstration was made by Herman M. Bundesen, health commissioner of Chicago, on a Rock Island Railroad train. Dried cows' milk was used exclusively on the run. It was shoveled into the firebox in snow white- lumps. The purpose of the experiment was to dramatize the fact that milk, which can be used as fuel for a locomotive, is also fuel for the human body, containing energy which the body gets from it as much as the locomotive does.

Trimming out fence-corners with a scythe has rather undeservedly become a lost art in many sections of the country.

PENNSYLVANIA DAIRY MANUFACTURING SHORT COURSES

Plans are being made by the Dairy Husbandry Department of the Pennsylvania State College for its Thirty-third Annual Creamery Short Course. This year three separate short courses each lasting for two weeks have been scheduled to replace the eight weeks' general course given in former years. This change was made to take care of the demand for more specialized work. Under the new plan, men who formerly could not be away from their plant for eight weeks can come in and stay for the two weeks' course in a particular line of work. Those who have had no plant experience and want a general course in all manufacturing subjects will have the opportunity to stay throughout the three courses.

The Pennsylvania State College Creamery, equipped with up to date machinery for handling butter, cheese, ice cream, market milk and condensed milk offers excellent facilities for teaching dairy manufacturing work. During the past year 157,969 pounds of butter, 13,277 pounds of cheese, 10,000 gallons of ice cream and 150,000 quarts of market milk were handled in this plant. Located as it is in the midst of hundreds of dairy plants, the College is in a position to place men who do satisfactory work, in good positions at the close of the course.

The courses offered this year will be as follows:

1. Testing dairy products and the manufacture of butter and cheese, January 8th to 24th.
2. Ice Cream Making, January 26th to February 6th.
3. Market Milk and Milk Condensing, February 9th to 20th.

The work will be handled by the regular Dairy Departmental staff, assisted by specialists in the various lines of work. The expenses in connection with the course will be a registration fee of $10.00 for each course, board and room $10.00 to $12.00 per week, books and white suits $10.00 to $15.00.

Application for registration in the short course or any other information regarding the work can be had by writing to Professor R. G. Bressler, Pennsylvania State College, State College, Pennsylvania.

Mother Nature sees that the frost is on the pumpkin, but we have to see that the corn is in the shock.

FEWER CASES OF SERIOUS ANIMAL DISEASES REPORTED

Fewer cases of hog cholera, black-leg and anthrax, all serious infectious diseases affecting livestock in Pennsylvania, were indicated by the September 1 report of the State Bureau of Animal Industry.

Only 145 cases of hog cholera were reported during the first eight months of 1924 as compared with 375 during the same period last year.

Anthrax appears much less prevalent this year. Up to September 1 only 20 cases were reported compared with 133 cases last year. Black-leg was also reported less with only 29 cases when 303 cases were found a year ago.

The co-operation given the state by local veterinarians and the prompt service rendered by the field agents employed by the state, make it possible to control these extremely infectious diseases before any great spread and loss result.

SUGARED
Schumacher Feed
and
Boss Dairy Ration

And the Nation's Milk Supply

IN the North, South, East and West, wherever dairy cows are kept, Sugared Schumacher Feed and Boss Dairy Ration are a mighty important part in the nation's milk production. These two famous feeds when fed in combination make a dairy ration which for "long time" milk production and health maintenance you cannot equal.

Sugared Schumacher, the *Old Reliable* carbohydrate feed, is the maintenance part of the ration and provides the cows with stamina, vitality and vigor to "stand up" under long and heavy milking periods, while Boss Dairy Ration with its 24% protein content furnishes the choicest protein concentrates to make big milk yields. These two feeds fed in combination represent real true feeding economy.

For Sale By All Good Dealers Everywhere (D16)

The Quaker Oats Company
1665 Ry. Exchange Bldg. Address CHICAGO, U.S.A.

OVER 600 STUDY 'AG" AT STATE COLLEGE

A total of 150 new students entered four year courses at the agricultural school of the Pennsylvania State College this fall. There are 499 young men and women pursuing four year courses at this time, a slight increase over last year when Penn State ranked among the five largest agricultural colleges in the country.

Including 58 students in the four year course in agricultural education, affiliated with the new school of education at Penn State, and 78 two-year course with special students, there are now 635 studying agriculture, a drop of 55 from last year's figures. Those students majoring in four year agricultural courses, ten in number, include 94 seniors, 107 juniors, 148 sophomores and the 150 freshmen.

GET READY FOR THIS YEAR'S ICE HARVEST

Every dairy farmer should, if possible, harvest a crop of ice during the coming winter. With the demand for better care of milk on the farms, the necessity for harvesting an ice crop can not be underestimated.

See that your ice house is ready for the coming cold snaps. Tools and equipment can be gotten ready in advance.

There is still time to build an ice house, if you do not have one. The U. S. Department of Agriculture can furnish you with plans and details regarding the construction of ice houses, for the asking.

A good supply of ice will greatly facilitate the cooling of milk next summer and also serve many uses in the farm home.

Fall pruning is timely pruning.

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK FROM COW TO CONSUMER

CHERRY-BASSETT-WINNER CO. BESTOV MILK PRODUCTS EQUIPMENT

BABCOCK TESTERS
Hand operated
Easily attached to any bench or table by thumb screw. Finest quality workmanship and materials.

Galvanized STEEL BUCKETS
2 bottle size $6.50
3 bottle size $7.50
Heavy Metal, each, 95c

CAN BRUSH
4½ x 8 inches
35c each

Bottle Brush
2¼ x 15 inches
50c each
Get brush catalog for other brushes.

THERMOMETERS
Floating
Made for dairy work
Hand-written scale with large plain figures.
25c each

Lansdowne Milking Stool
Made in one piece of galvanized malleable iron, which cannot break or rust
Light (3½ lbs.) and strong
$2.00 each.

North Milking Pail
No other covered pail compares with it. Advocated by all authorities.
$3.50 each

Shipping Cans
N. Y. Style
First quality, heavy shipping cans with "umbrella cover."
40-qt. $4.85 each
46-qt. $5.10 each
Marking—any style—extra

FEED COOKER
Consists of fire box, galvanized steel boiler with four handles and cover, length of 6 in. stove pipe and one elbow.
25 gal. $15.50 40 gal. $18.00
75 " 24.00 100 " 25.00

WASH TANK
Made of heavy galvanized steel with drain board.
3 ft. long $18.00
4 ft. long $21.50

Brooms
Nailed Heads
Mixed, coarse and fine fibres
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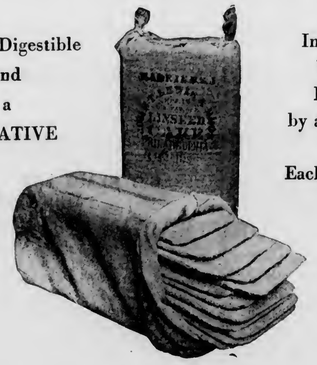

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CONSUMERS DEMAND FOR MILK IN PHILADELPHIA

(Continued from page 10)

cil consistently for the last two years. The appeal of this poster is that of the health of the children and the mother's joy and happiness in seeing them grow.

Number two is the poster "Full of life, health and pep" showing two boys boxing and grandfather looking on. This poster has been found, by the Dairy Council, to be very popular as it shows the importance of milk for old and young.

(These posters have been illustrated in previous issues of the Inter-State Milk Producers' Review.) Ed.——

USE OF MILK IN HOTELS AND RESTAURANTS

Fifty Philadelphia restaurants were studied with a view of finding out how the use of milk in such places differs from the use of milk in homes. It was found that in the homes a large proportion of milk was used by grown ups in cooking. In restaurants a large proportion was used as whole milk in drinking, except in the case of high class hotels and exclusive restaurants where a greater proportion was used in cooking.

It has been said that restaurant people do not like to sell milk as there is more profit in coffee. It was interesting to note that thirteen managers said they preferred to sell milk; nineteen said coffee, ten had no preference and eight said they had not considered the question. While it is impossible, in a short review, to give a comprehensive summary of the results of the survey, it is evident that Messrs. Lawrence A. Adams, Associate Marketing Economist, Bureau of Agricultural Economics, U. S. Department of Agriculture; George O. Smith, Marketing Specialist, Bureau of Markets, Pennsylvania Department of Agriculture; Newell M. Beatty, Victor C. Nofron, Donald C. Woods, Field Assistants, Bureau of Agricultural Economics, U. S. Department of Agriculture, have conducted a survey and have gotten together a very informing document, which will be of great service to the officers of the Inter-State Milk Producers' Association, the Philadelphia Inter-State Dairy Council and the Philadelphia dealers in formulating sales plans for the future. It contains a great deal of information which will be found very valuable to all readers of this publication. It is fortunate for the farmers supplying Philadelphia that such a survey has been made as it will enable them to arrive at a comprehensive understanding of the market situation in Philadelphia.

Copies of the complete survey may be had by applying to the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C. or this office. (Editor)

MONTGOMERY COUNTY COW TESTING ASSOCIATION

MONTHLY NEWS LETTER

Edited by Carl A. Sager, Tester. R. G. Waltz, County Agent

The results of the cow testing work for the month of September shows, that 26 herds were tested comprising 255 cows in milk and 89 dry.

Members of the association are starting to cull out the boarder cows. The association has been in operation 5 months which is long enough to suggest the unprofitable ones. During the month of September, 11 unprofitable cows were disposed of.

Thirteen cows produced over 40 pounds of fat and 26 cows produced over 1,000 pounds of milk each. Two cows produced over 50 pounds of fat while 7 produced over 1,200 pounds of milk.

The honors for the highest butterfat producing cow in the association for the month, goes to a grade Holstein owned by Owen Gerhart of Palm. She produced 1,242 pounds of milk containing 5.4 fat content, or 67 pounds of butterfat for the month. She is 6 years old and freshened August 20.

The highest milk producing cow in the association for the month was a pure bred Holstein owned by J. L. Wood and Sons of Red Hill. She produced 1,342 pounds of milk. This pure bred Holstein was the highest butterfat producing cow in the association for the month of August. She is 6 years old and freshened July 6.

The second highest milk producing cow was a pure bred Holstein owned by H. D. Allebach of Trappe, she having produced 1,266 pounds of milk.

The 10 highest cows in the association for butterfat for the month of September were as follows:

Owner	Name of Breed of Cow	Age Yrs.	When Fresh	Lbs. Milk	Lbs. Butterfat
Owen Gerhart	Miss Fisher, Gr. H.	6	Aug. 20	1242	67.07
W. J. Hendren	No. 7, P. B. J.	4	Aug. 3	849	51.79
J. L. Wood and Sons	Lily, P. B. H.	6	July 6	1342	48.83
C. Wm. Haywood	Buttercup, Gr. J.	9	June 26	969	48.45
A. K. Rothenberger	Annie, P. B. H.	6	Apr. 12	1242	43.17
H. D. Allebach	Madaline, P. B. H.	4	Aug.	1266	43.04
C. A. Wismer	Canary, P. B. H.	11	May	1209	42.32
W. J. Hendren	No. 3, P. B. J.		Aug. 13	879	42.19
P. A. Metz	Haily, Gr. H.	12	Aug. 10	1161	41.80
A. K. Rothenberger	Old Aaggie, P. B. H.	6	Feb. 3	1146	41.26

Highest herd average milk production:

	Cows Milking	Average Lbs. Milk
J. L. Wood and Sons	15	826
Levi G. Schultz, Est.	16	786
C. A. Wismer and Son	4	775
P. A. Metz	4	758

Highest herd average butterfat production:

	Cows Milking	Average Lbs. Fat
J. Alan Middleton	2	31.39
O. M. Woodward and Son	8	29.89
P. A. Metz	4	28.42
J. L. Wood and Sons	15	27.62

Highest herd average test:

	Average Test	Breed
W. J. Hendren	5.31	P. B. Jersey
J. A. Middleton	5.01	P. B. Guernsey
School of Hort.	4.98	Mixed
C. Wm. Haywood	4.84	Jersey
Wm. H. Landis	4.48	P. B. Holstein

The highest testing cow for the month was a pure bred Jersey owned by W. J. Hendren of Trappe, her test being 7.1.

GOOD SCHOOL LUNCH WITH HOT DISH

The child who goes to a school where there is a school lunch room feels that he is "different" from the others if he is given a luncheon to bring from home.

Tommy had just such a feeling. He was out of it. He thought that if he could only buy his lunch like the others his happiness would be complete. Mrs. Wallace, his mother, refused to allow her son to do this. Tommy had a good home and plenty to eat, it was foolish for him to spend that extra money. She tried to give him the thing he liked, cake, pie and doughnuts, ham sandwiches with fresh white bread. But still Tommy wasn't satisfied.

Being a very good mother, Mrs. Wallace decided that now she would visit the school and find out about these lunches. The next day just at noon she made this visit to the lunch-room. Here she found a light airy room, filled with clean tables and chairs, at the far end was a long counter, covered with spotless oilcloth from which lunch was being served. There was a lovely thick cream soup, and one filled with vegetables, hot cocoa, tall glasses of rich milk and row after row of little earthen cups filled with baked custard. The girls serving the lunch, were dressed in clean white aprons and caps and they were supervised by a teacher dressed in all white. The teacher explained to Mrs. Wallace, how children needed at least one hot nourishing dish at lunch time, with their milk and cold lunch.

The object of the lunch-room was to supply this. The cooking class, planned, cooked and served this food, any of which could be had for a very low sum, just to cover the expense. She explained that most mothers packed bread and butter sandwiches and fresh fruit in the children's lunch box and they purchased, hot cream soup, cocoa, etc., to go with his lunch. She displayed charts, showing how many children had benefited from these lunches, with one hot nourishing dish and glass of milk, in place of the old cold doughnut and pie lunches.

The next morning when Tommy came to breakfast, such a surprise awaited him. Mother had packed two nice raisin bread sandwiches, placed a big red apple in his hand and with it ten new shining pennies. Any noon, one has only to glance in the school lunch room, to see Tommy the very first in line, and perhaps the end of the school term will find him first of his class, too.

Suggestions for the lunch box, packed by mothers:

Sandwiches

Cottage cheese	Lettuce
Cottage cheese and jelly	Thin ham
Cottage cheese and jam.	Peanut butter
Cottage Cheese and nuts	Brown bread
Cottage cheese and bacon	Raisin bread
Egg sandwich	

Fruits and Sweets

Apples	Dates
Oranges	Raisins
Grapes	Figs
Peaches	Raisin cookies
Pears	Stewed and canned fruits
Pluns	

The "Hot Dish"

(Prepared at the school)

Cocoa
Cream and potato soup
Cream of tomato soup
Macaroni and cheese
Escalloped potato
Vegetable stew
Vegetable soup
Creamed rice
Escalloped salmon
Hominy
Hot baked apples
Hot baked custards
Baked beans

Milk should always be served in case pupils do not bring it from home.

A GLASS OF MILK

He was a lord of high degree
(You note these lords are always high!)
Who met a milkmaid (yes, siree!)
One day as he was riding by.
He asked the maiden—smooth as silk—
He asked her for—a glass of milk!

The maiden smiled her winsome way.
(They're always winsome, are they not?)
This tale is not a bit *risque*—
There's something lacking in the plot,
When such a lord of such an ilk
Politely craves a glass of milk!

But listen while I whisper low
There was a reason for his plea.
He might have changed it (who's to know?)
Had he been riding light and free.
But close beside him rode his dame—
A massive Juno swathed in silk.
(You see now why the plot goes lame,
And dwindles to a glass of milk!)

Mabel Haughton Collyer.

"Life"

FALL GARDEN CLEAN-UP CONTROLS INSECT PESTS

Much can be done in the prevention of insect attacks on next year's garden crop if the garden is now cleaned of crop remnants such as old vines, stalks and decayed vegetables. All remnants should be gathered and burned or buried deeply. Many of our most troublesome pests feed in the late fall on the part of this year's crop which is not used, states T. L. Guyton, Chief Entomologist, Pennsylvania Department of Agriculture. The striped cucumber beetle and the squash bug are found in great numbers on old squash vines, discarded, partly rotted cucumbers and pumpkins. The cabbage appid is numerous on old cabbage, stubs from which the head was removed earlier in the season. The same is true of insects of many other garden crops. Not only will the number of overwintering insects be made less by this clean-up but the overwintering quarters of many insects will be destroyed. Burning or burying crop remnants will also help in the control of plant diseases.

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CULL THE HERDS

By A. L. HAECKER

This is an excellent time to study economic production. So long as we had a high market little attention was paid to this subject. Now with a lower price for dairy products more attention will be given to the subject of producing with economy.

This is a competitive world, and more and more of our farmers are finding it necessary to meet competition from their own community, and from county, state and even foreign countries. Nature's law of the survival of the fittest will in the end dominate, and the fittest in dairying will be the man who understands the factors of economic production.

We hear quite a little about overproduction of dairy products. We are, it is true, producing more than we have for some time, and there is more milk, butter and cheese on the market than there has been for several years. With importations and increased interest in dairying we may expect a temporary over-production and a lower price. With cheaper dairy products consumption will be stimulated. Thousands of people who have been using butter substitutes will return to butter. People practicing economy will be inclined to spread it on thicker. They will use more cream on their breakfast food and in their coffee, and the chances are that the increased consumption will quickly pick up the surplus. With this lower market we will no doubt stop some of the importation which will lower the market in foreign countries and we hope will increase consumption in foreign lands.

This low market will turn a good many away from the dairy business. They will let the calves suck the cows and will remark to their neighbors that it don't pay to milk, and the pendulum will eventually swing back. Dairying is not a lazy man's job. The price of success in the dairy comes rather high, and not so very many are willing to pay. Men who have good cows and are giving them good care need have no worry, in fact we will probably see a splendid market for better bred dairy cattle stimulated by the very fact that only such will survive with low prices.

This is an excellent time to cull the herd, weed out the unprofitable cows and fill their places if you wish to increase your herd with good animals. Cow Testing Associations have demonstrated for many years that the large producing cows are the greatest profit makers. These Associations have also proven that liberal feeding of balanced rations will prove the most profitable.

Only a small per cent of the dairy cows of this country are dairy bred animals. There is room for fifty years of culling, testing and breeding and still we will be far from where we should be. Keep in mind that some of the dairy breeds have already required several hundred years to build.

Cows that freshen in fall and early winter as a rule produce the largest records. In a crop-growing country such as this why not have the cows freshen during the winter months when the prices for butterfat are high. Many of our farmers are still following in the old rut of having their cows freshen in the spring, and when they are the busiest with their farm work they have the most milking to do. This should be corrected.

There never was a better time to enter the dairy business and be sure of a future and a profit, but this reward will fall to the man who uses the right cow and gives her the right care. A country that produces cheap feed will in the end survive. The first man to quit the business is the fellow with the low producing cow, feeding a high priced ration composed of shipped-in foodstuffs. Where alfalfa and corn can be produced on the farm there is little need for worry over making money in the dairy, especially if the right cows and methods are used.

"IS CO-OPERATION GOING AHEAD?"

"Co-operate, of course, but keep right on running your own farm" says Andrew S. Wing, in a recent issue of "Farm and Fireside", entitled "Is Co-operation Going Ahead?"

"There is no magic in co-operation. It is merely a way of doing business. There is nothing in co-operative marketing that will enable your neighbor, if he is a poor farmer, to make as much money as you, a good farmer, can make, and justly so. It would be a sorry world indeed if intelligence and industry were not more richly rewarded than dullness and indolence. All the co-operation in the world won't ever bring top prices for a third rate crop, nor will it keep the weeds out of the corn. But if you are a good farmer co-operation might mean the difference between a profit and a loss in marketing your crops."

"There are a lot of good things which you can do through co-operation, and there are a lot of things which you cannot do. Some of the things you can do are:

1. Orderly marketing is made possible by preventing market gluts and providing an effective way to transport farm products to a spot where they are in demand and at the proper time.
2. It assists in proper grading, packing and processing.
3. It provides adequate storage facilities.
4. It helps finance farmers until their crops are sold.
5. It effects savings in the cost of distribution of farm products by doing business on a large scale.
6.—Properly managed and financed, a large co-operative marketing association should get a higher average price for your products than you could get as an individual.
7. By acting as a trade association a co-operative can accomplish much in the way of clearing up trade channels, informing its members, securing needed legislation, fighting legal battles, and etc.

All these things and more, the right kind of a co-operative association will do for you. But there are a number of things which it cannot do.

1. It cannot fix prices except within reasonable limits that are in accordance with market conditions.
2. It will not materially raise prices on a world crop in the face of world wide over-production. A good example of this is wheat.
3. It will not prevent over production, or at least no plan has yet been divised which would do this.
4. It will not reward sloppy farming, but it will reward the farmers who raises a quality product.
5. It is purely good business practice, not a panacea. It will not work miracles nor accomplish results overnight.

"Do you consider that the co-operative marketing movement has reached its peak; is it going forward or is it on the decline?

The writer's conclusions have been "that co-operation is here to stay, and that it can accomplish valuable results for the American farmers."

WASTE CRANK CASE OIL IS GOOD MITE KILLER

Waste oil removed from the crank case of tractors and automobiles can be put to good use this fall freeing poultry flocks of mites, advises the Pennsylvania Department of Agriculture.

An oil spray can be used effectively to kill the mites found on and near roost. Almost any oil can be used but since many flock owners have automobiles, the waste crank case oil is the most practical material. Besides oil, a strong lime sulphur, such as that used in the dormant spraying of fruit trees, can be used to kill poultry mites.

When it comes to chicken lice, specialists state that sodium fluoride is perhaps the most satisfactory material to use. This material is a white powder which, if carefully handled, is harmless to man, but is an effective lice killer. During the fall, chickens are most successfully treated by the so-called pinch method. Seven pinches of the powder are used on each chicken, a pinch being the amount of powder one can hold between the thumb and forefinger. The first pinch is rubbed into the feathers on the back of the neck, the second and third on the back near the base of either wing, the fourth on the rump, the fifth under the vent and the sixth and seventh under and around either thigh. Care must be exercised to keep the dust out of the eyes and vent. Usually one application of the chemical gives a complete control.

$2,000,000 NEEDED AT ONCE TO FIGHT TUBERCULOSIS

The Pennsylvania Bureau of Animal Industry is being swamped by requests from herd owners throughout the State to have their cattle tuberculin tested. On account of inadequate funds, more than 22,000 herds are awaiting the test, according to a recent report by Dr. S. E. Bruner. At the rate these requests are coming in, it is estimated that owners of 600,000 cattle will want their herds placed on a tuberculin-free basis during the next two years. In order to satisfy their demands, pay indemnities and do the work efficiently, at least $2,000,000 is needed, declares F. P. Willits, Secretary of Agriculture.

It is also pointed out by Department of Agricultural officials that while Pennsylvania ranks third among all the states in the value of her dairy products, and sixth in the total number of dairy cows, she ranks only fourteenth in the number of cattle under supervision for the prevention and eradication of tuberculosis. Unless tuberculosis eradication work continues to progress in Pennsylvania as it is in other leading dairy sections, the market for the State's dairy products and livestock will be decreased in favor of those states having less tuberculosis in their dairy herds.

UDDER DISEASES OF DAIRY COWS

The dairy farmer frequently suffers a loss of valuable cows because of udder troubles, and because of the importance of these losses and the possibility of prevention and cure, the United States Department of Agriculture has issued Farmers' Bulletin 1422, Udder Diseases of Dairy Cows. This publication contains careful descriptions of the most prevalent diseases of this nature and simple methods of prevention and treatment. It is the first bulletin of the kind ever issued by the department.

The bulletin, which begins with the statement that "A dairy cow is no better than her udder," contains chapters on more than 20 common diseases and conditions which have been responsible for great economic losses to the industry. In addition there is some general information on the care and management of dairy cows with a view to the prevention of many troubles caused by carelessness. There is also a discussion of some of the vices developed by cows and calves and methods for preventing them.

Copies of the bulletin may be obtained as long as the supply lasts, by addressing the Department of Agriculture, Washington, D. C.

"All knowledge is lost which ends in the knowing, for every truth we know is a candle to work by."—*Ruskin.*

STATE-WIDE FARM CENSUS STARTED IN 61 COUNTIES

The first farm census ever taken by the State of Pennsylvania is now under way in over 60 counties. Only five counties remain in which the census work will not start until after November 1. The enumerations are made by the county assessors in connection with their triennial assessment work. To facilitate the census, the State Bureau of Statistics has mailed a total of 2679 schedule books to the County Commissioners' offices.

This census will give complete data on the acreage of crops and on other farm operation. All agencies interested in the improvement of agriculture are co-operating in every way possible to make this census a success. The statistics coming from this census will be invaluable in giving state crop estimates, in building suitable plans for agricultural improvement, in studying production and marketing problems and for many other purposes of direct benefit to farmers. The information is treated as confidential and is not used in connection with any taxation measure.

Lack of paint not only lets a building look wretched; it lets it rot. On some farms fall is the best time of year to paint 'em up.

25 FARM ORGANIZATIONS PLANS STATE-WIDE SHOW

Twenty-five state-wide agricultural organizations have already started preparation for their annual Farm Products Show to be held in Harrisburg, January 19, 20, 21, 22 and 23, 1925, according to an announcement by the Show Committee. The Committee reports that many new features have been added this year and the best show ever is in prospect.

Keener competition than ever before is expected in all departments since the awards have been increased 50 per cent, a total of $1,780 more than last year. The total premiums will be $5,250.

Four large buildings located conveniently in the central portion of Harrisburg have already been secured for housing the Show, reports Manager H. E. Klugh.

Meetings of all 25 farm organizations which are co-operating to make the Show possible, will be held during Show Week so that farmers can attend these meetings as well as visit the exhibits. Reduced fares on all principal railroads have been arranged by the Pennsylvania State Chamber of Commerce for persons attending this annual event.

Farmers and fruit growers are asked by Frank P. Willits, Secretary of Agriculture, and Chairman of the Show, to keep the State Show in mind while harvesting their crops this fall and make suitable selection for both local and the State-wide Show.

JEFFERSON FIRST COUNTY TO TEST ALL CATTLE

Jefferson is the first county in Pennsylvania to have all cattle tested for tuberculosis. This county has been recommended to the United States Department of Agriculture as eligible to a place in the Modified Accredited Area class in which there are now 40 counties from different parts of the United States. In order to be placed in this class, a county must have tested all cattle within its boundaries. The work was started in Jefferson county in January, 1924, when 10,797 of the 11,406 cattle were given the test. At that time, 68 reactors were found. During May and September, the remaining herds were tested.

The fact that this complete eradiction of bovine tuberculosis in Jefferson county was made possible by the 100 per cent co-operation of the herd owners is a commendable feature of the work. At the present rate of testing, other counties in Pennsylvania will soon have all herds tested so that they can be placed in the class with Jefferson. In Mercer and Crawford counties all except a fraction of one per cent of the herds, are now tested.

MARYLAND TEAM WINS GUERNSEY TROPHY

The dairy cattle judging team of the University of Maryland, by winning the highest score on judging Guernseys at the Eastern States Exposition, carried home the Award of Merit Trophy offered by the American Guernsey Cattle Club. The members of the team were Edward Smith, Leander Stuart, and Wilbur Pearce. Professor L. W. Ingham coached the team.

The highest individual in judging Guernseys was Mr. Pettee, of the University of New Hampshire, who also made the highest score in the judging of all dairy breeds. In judging all breeds, the New Hampshire team took first place.

PENNSYLVANIA FARMERS FIND GAS AND ELECTRIC POWER IMPORTANT AID AND CONVENIENCE IN FARM WORK AND HOME LIFE

Pennsylvania farmers are finding gas and electric power a great aid and convenience in their work about the farmstead and in their homes, states John M. McKee, Deputy Secretary of Agriculture, in commenting upon recent figures gathered from every county in the State by the Bureau of Statistics, Pennsylvania Department of Agriculture.

These figures show that the day is apparently here when some kind of power other than man and beast is essential in agriculture. It is estimated that 86,411 farms, or 43 per cent of all farms in the State, have gas engines other than tractors, and 18,277 farms, or 9 per cent. have electric lights and power. Many farmers are finding that equipping their farmstead with electrical conveniences is increasing the value of their property more than the cost of this equipment according to interviews with progressive farmers in many different counties made by engineers of the Giant Power Survey.

DISINFECT THOROUGHLY IN HOG CHOLERA CONTROL

Disinfection for hog cholera as it is usually carried out is misleading and often worthless. This work of disinfecting a barn or a hog lot is done for the purpose of destroying disease-producing germs and to be effective all of these germs must be destroyed. In hog cholera, for example, all parts of the carcass of an infected hog carry the disease and the hog throws off the germs continually.

The germ of hog cholera can live in sheltered places outside of the body for days or weeks, and in some cases for months and even years. Since these organisms are so small and can be carried in the dust of the air, they may lodge in the smallest and most remote places about the pens where they can not be reached easily. Hence, it is very evident that the so-called disinfecting measures, which ordinarily consists of spreading about the premises a little strong-smelling substance, can not be depended upon to destroy the infection. As commonly used, it is not likely that half of the space actually occupied by germs is reached with the disinfectant.

Careful and thorough cleaning and disinfection, however, along with prompt anti-hog cholera vaccination will do much to eradicate hog cholera.

All boards in pens and lots should be cleaned of all foreign matter using soap powder or lye where possible. Cleaning by itself is 90 per cent of the disinfecting measure and every attention should be given it. After cleaning, a sprayer can be used for applying the disinfectant.

FARM WAGES IN NEW JERSEY

The New Jersey Crop Report, issue of October 10th, makes the following report as to farm wages in that state.

The average farm wages for labor hired by the month this season are estimated at $48.00 with board and $70.00 without board; by the day, including piece-work, with board $2.75 and without board $3.70. These are slightly higher than wages reported in July but about 1 per cent. less than last year at this time. The supply of farm labor at present is reported at 86 per cent. of a normal and the demand at 88 per cent. of a normal, making the potential supply about 97.8 per cent of normal as compared with September 1 potential of 98.9 per cent., August 1, 95.5, July 1, 92.3 and April 1, 84.4.

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MORE COW-TESTING ASSOCIATIONS DEPARTMENT REPORTS SHOW

A detailed report of cow-testing association work in the United States and of the increase in number of associations will not be due until January 1, 1925; but figures now on file in the Bureau of Dairying, United States Departments of Agriculture, indicate that on July 1, 1924, there were about 730 cow-testing associations in active operation, as against 627 a year ago. This is a gain of over a hundred during the past year, or a gain within the year of a little more than 16 per cent.

Though there was some increase in the number of associations in many States, the big gains were in a few States. Those having the largest actual increases are given in the following table:

State	Number of Associations 1923	1924	Increase
Michigan	53	91	38
Minnesota	55	90	35
Iowa	47	61	14
Wisconsin	151	163	12
Kentucky	10	20	10
South Dakota	4	10	6

Michigan ranks first in increased number of associations with a gain of 38, but Minnesota is a close second with a gain of 35. Wisconsin still leads in the number of associations, but Michigan and Minnesota are gaining on Wisconsin. Iowa, Kentucky, and South Dakota are also making substantial gains.

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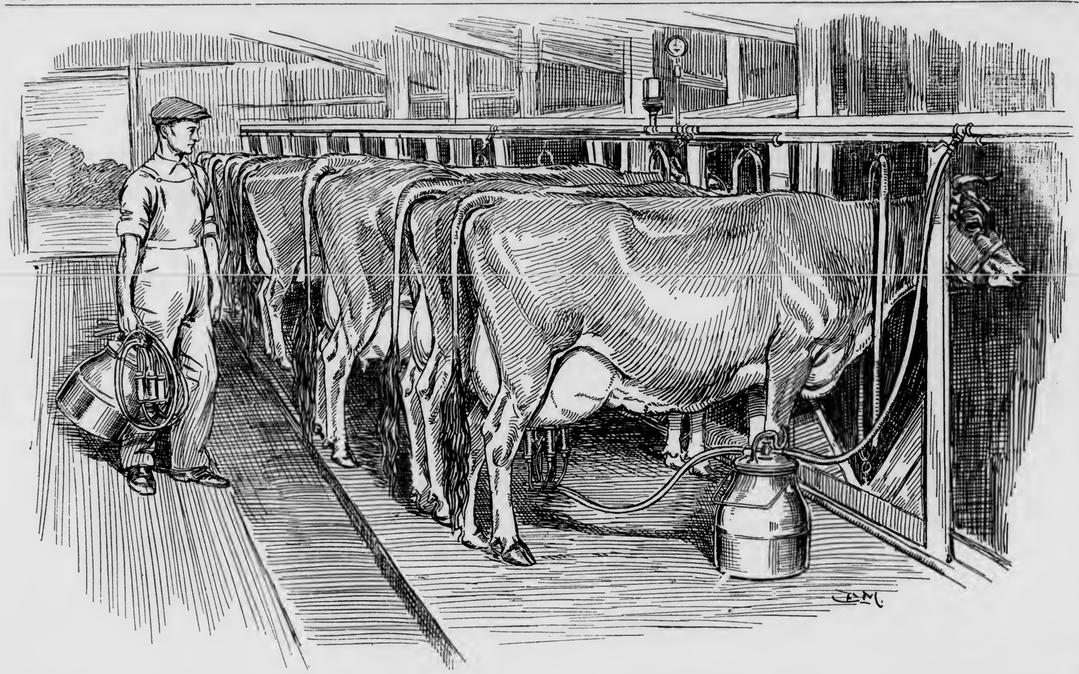

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INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTE

VOLUME V — WEST CHESTER, PA., AND PHILADELPHIA, PA., DECEMBER, 1924 — F 8

EIGHTH ANNUAL MEETING

The Inter-State Milk Producers Association

December 1-2, 1924

Over 400 delegates, from local organizations, and members of the Inter-State Milk Producers' Association were in attendance at the eighth annual meeting of the association, which was held at the Adelphia Hotel, Philadelphia, Pa., on December 1st and 2nd.

There was an outstanding feeling of co-operation throughout the entire days program. The business sessions were carried on with dispatch and the inspection and entertainment features of the meeting were extremely interesting.

The opening session, which was of an executive nature, was presided over by H. D. Allebach, president of the association and chairman of its executive board.

Upwards of 1200 shares of the capital stock of the association was represented by delegates and personal membership.

Following the reading of the minutes of the previous annual meeting, the following committees were appointed.

Nomination Committee

F. R. Bartlett, Talbot County, Md., chairman; George W. Schuler, Berks County, Pa., and Howard Fravel, Mercer County, N. J.

Tellers of Election

Edward Buffington, Chester County, Pa.; H. L. Way, Chester County, Pa.; P. M. Roe, Queen Anne County, Md.; C. Z. Keller, Somerset County, Md.; Robert Atkinson, Berks County, Pa.; William Moore, Washington County, Md.; Eli Fretz, Berks County, Pa.; and M. Thompson, Burlington County, N. J.

Resolutions Committee

M. C. Vaughan, Leroy Skillman and Maurice Michener.

The following report was presented by R. W. Balderston, secretary.

The office has co-operated very closely with the fieldmen this year in keeping our membership lists free from "dead wood" and in the way of making prompt transfers to correspond with the number of actual members shipping to each plant as shown on the lists of the plants.

The activities of the fieldmen and others to secure membership resulted in 1,753 new members being added to our rolls, but due to deaths and other causes the net increase is, as stated below, 1,342.

The net gain in membership during the past year has shown a healthy growth of the organization

The increase in membership by month is as follows:

December	224
January	75
February	146
March	108
April	107
May	197
June	106
July	70
August	202
September	203
October	129
November	186
	1,753

The following comparison will show our growth during the past five years.

	1919	1920	1921	1922	1923	1924
Members	10,538	12,538	14,697	15,427	17,680	19,022
Increase		2,000	2,159	732	2,253	1,342
Locals	186	217	244	251	264	274

This has enabled us to increase the percentage of active commission paying members and to much more closely test all the membership at the commission paying plants. Certainly, at no time in the history of the Association were we in actual possession of all the facts regarding that membership as at the present time. The use of drives for collection of members has proved to be extremely satisfactory and a large part of the increase in membership is due to this localized effort which has been carried out under the direction of the Organization Department.

This report shows the organization to be in a good financial condition. (Complete statements of the auditors report are on file in the association offices in Philadelphia, where they may be inspected by members of the organization).

C. I. Cohee, director of the Quality Control Department of the Philadelphia Inter-State Dairy Council, made a complete report of the work of the department in connection with the Sanitary Regulation, involving the production, care and distribution of fluid milk. (This report is printed elsewhere in this issue).

Frank M. Twining, director of the testing department of the Inter-State Milk Producers' Association, presented a report as to the field work done during the past year. (This report is printed elsewhere in this issue.)

Nominations For Directors

The nominating committee presented the following names of candidates to fill eight vacancies in the Board of Directors. These offices had expired by limitation.

The following names were presented:

C. F. Preston, Chester County, Penna.
A. R. Marvel, Talbot County, Md.
F. M. Twining, Bucks County, Pa.
R. I. Tussey, Blair County, Pa.
J. A. Poorbaugh, York County, Pa.
Frederick Shangle, Mercer Co., N. J.
J. H. Bennetch, Lebanon County, Pa.
I. V. Otto, Cumberland County, Pa.
F. O Ware, Cumberland County, N. J.

There were no additional names presented from the floor and the above named candidates were declared nominated.

(Continued on page 9)

DIRECTORS, INTER-STATE MILK PRODUCERS' ASSOCIATION, 1925

Bottom Row, E. H. Donovan; E. Nelson James; Frank P. Willits; H. D. Allebach, president; Robert W. Balderston, secretary; Frederick Shangle, vice president; A. B. Waddington. Middle Row, J. H. Bennitch; A. R. Marvel; H. I. Lauver; C. F. Preston; S. Blaine Lehman; S. U. Troutman; Albert Sarig; J. A. Poorbaugh; S. K. Andrews; Robert F. Brinton, treasurer. Top Row, E. R. Pennington; John V. Bishop; J. W. Keith; Ira J. Book; H. B. Stewart, I. R. Tussey. (F. M. Twining and I. V. Otto, not present.)

A REVIEW OF THE YEAR'S WORK

Annual Report of the President

By H. D. ALLEBACH

In planning the work for 1924 our aim was to give our members better service, in both testing and weighing, to insist on a better quality of milk and many other things. These involve:

Organization
Sanitary Regulations
Supply and Demand
Price
Testing
Legislature
Dairy Council
National Milk Producers' Federation
The Milk Producers' Review

Organization

We have had wonderful success in increasing our membership during the past year. A total of 1753 new members have been added, a large share of the credit must be given to the department having charge of this work. A system of drives, operating in different sections of the territory have been responsible for this large increase in membership.

These 1753 members make quite an addition to our organization. Most of them have been secured in territories where the dealers are paying commission.

There is still considerable work to be done in some sections. We find that some stations are not over thirty per cent. organized, while others are almost one-hundred per cent. organized.

We believe that, in territories in which the dealers are paying commission we have over 70 per cent. of the farmers signed up.

I realize that we must, at all times, keep someone checking on our membership because farmers are constantly moving from one place to another, frequently outside of the immediate district; while new farmers, not members of the organization, are moving into our territory. We believe that we must keep continually at organization work in order that the representation of the farmers be kept at the highest possible percentage.

Sanitary Regulations

At our last annual meeting the new Sanitary Regulations were unanimously adopted by the delegates attending. The burden of enforcing these regulations was placed on the Quality Control Department of the Philadelphia Inter-State Dairy Council.

Up to the present time they have visited 13,755 farmers, issued 15,100 temporary permits and 2845 permanent permits.

This "clean up" program is being talked of all over the United States and every other organization feels this is a great piece of work, the greatest of its kind ever put over by any farm organization.

We have the support of the Pennsylvania Department of Agriculture and the State Board of Health, of New Jersey, Delaware and Maryland, and the Board of Health of Philadelphia and of many smaller towns.

Supply and Demand

The supply during the past year, we believe, has been normal. Demand, on the other hand, has been somewhat below normal, due to the unsatisfactory labor conditions.

Feeling that possibly we would have an over-production this fall we endeavored to hold meetings in every locality in our territory, explaining to the farmers the need of close cooperation and the danger of an oversupply.

We are more than pleased with the attitude of the farmers at these meetings and the cooperation given us. We find ourselves today with a good market, without any great surplus. Some dealers are opening up their plants and are willing to accept more milk. This puts our market in a more healthy condition than it was earlier in the season.

Milk Prices

As you already know, the basic price has been maintained unchanged since our last annual meeting. It has not been as high in 1924 as it was in 1923, but we should be thankful that the basic price held during this entire year, considering the prices paid for milk in other territories.

The basic price for 3.5 per cent. milk in the fifty-one to sixty mile zone, delivered at receiving stations, has been $2.57, net to the producer.

The surplus price for 1924 has not been as high as 1923, due to unfavorable conditions in the butter market. The surplus prices for 3.5 per cent. butterfat in class I ranged, during the year, from $2.33 down to $1.57; while class II ranged from $1.90 down to $1.42. These prices, on an average, for the nine months of 1924 netted the producer $1.834 for class I and $1.576 for class II surplus.

The following tabulation of monthly prices, for 3.5 per cent. milk, cover the year 1924.

	Basic 3% Milk	1st Surplus	2nd Surplus
December	2.59		
January	2.59	2.33	1.90
February	2.57	2.21	1.80
March	2.57	2.05	1.67
April	2.57	1.64	1.36
May	2.57	1.62	1.31
June	2.57	1.75	1.42
July	2.57	1.71	Av. 1.576
August	2.57	1.61	
September	2.57	1.59	
October	2.57	Av. 1.834	
November	2.57		

Butter prices throughout the year have been materially below those of 1923. The heavy surplus of butter in the world's markets has kept prices at a lower level. If each family on the farm would use just one-half pound more butter each week, or if those who are using butter substitutes, such as oleomargarine, would use butter instead, this great surplus of butter might not have been here to menace our markets.

The weighted average price for 3.5 per cent. milk, delivered at receiving stations in the 50-60 mile zone, during the past year, was about $2.51 per hundred pounds.

The average price to the producer in the Dairymen's League, operating under a pooling plan, at the same comparative distance (201-210 mile zone) for the first ten months in 1924, was $1.798 plus $.08 (8c) paid by certificate of indebtedness.

The average price of 3.5 per cent. milk in the Pittsburgh territory, operating on a partial pooling plan, was about $2.04 per hundred pounds, delivered at receiving station.

The average price of 3.5 per cent. milk in the Baltimore territory at receiving station was $2.39.

The situation in the smaller towns and cities, while somewhat upset by general market conditions throughout the year, has greatly improved during the past month or two, and now may be said to be in particularly good shape.

The manufacturers of milk products, such as evaporated and condensed milk and soft cheese, have not been able to pay full association price, and manufacture in competition with other companies in different territories where lower prices for milk prevailed. Some such buyers failed to co-operate. Others have asked for price concessions. In most cases these concessions were temporarily allowed, particularly where they did not disturb other market conditions.

The failure of milk dealers this past year have not been quite as numerous as in 1923. The Quaker City Dairies, operating plants at Goldsboro and Barclay were closed with a considerable loss to producers. We have arranged to settle the business on a basis of twenty cents on the dollar. The failure of the Pennsylvania Milk Products Company last year, also was a big draw-back to the territory around Harrisburg. Trustees were elected to take care fo that business and now they have sold the plants with the understanding that the creditors will get about 23 cents on the dollar.

No additional Grade B Receiving Stations were opened in 1924 by buyers of milk. The Nassau plant in Delaware, a Grade A station was opened and is producing a splendid quality of low bateria and high butterfat milk.

The P. E. Sharpless Company, Rising Sun, Maryland, has sold its receiving station at that place to Sheffield Farms, New York City. This transfer has recently been made and its co-operation with the Inter-State Milk Producers' Association, has not yet been definitely arranged.

The same buyer has also sold its Concordville, Toughkenamon and Cochranville (Pennsylvania) plants to the Kraft Cheese Company. These transfers have been consumated less than ten days ago.

Testing

This department has endeavored to test every members' milk at least eight times during the year; usually twice every third month. Of course, in some cases the testers have failed to follow this plan on account of conditions in their territories. I believe, that almost every member has received his test card promptly.

The Testing Service has been very satisfactory. Nearly every buyer is endeavoring to give the farmer a fair test, knowing that our testers may turn up at their plants at any time.

Many mistakes have been corrected right in the milk plants. In cases of dispute our men insist on the plant tester checking that sample with them and if our tester is correct the test is changed at once. We appreciate the courtesy that the receiving station men have given us and our fieldmen and also the co-operation of the milk buyers in our territory. I might say that the feeling of the dealers toward our testing has improved and I believe that everyone is trying to do the right thing.

Our men have visited 167 plants during the year and have made 60,000 check tests. One of our testers, who has kept strict account of the tests made by him and also checks on dealers' tests, finds that out of 5,500 tests the variation is only .03 per cent.

In the beginning we realized the demand for this check testing work. We now realize the benefit and education it has given many of the farmers and we believe it has brought about a better understanding between the buyers and producers, in addition to the financial benefit to the member.

Legislature

The legislative work this year has not been particularly heavy. There was no legislative session in Pennsylvania. Considerable work has, however, been done in connection with tariff matters in Washington.

The great question at the present time is to prevent the tariff commission from taking unfavorable action on the tariff imposed on vegetable oils, used in oleomargarine. We are making every effort to protect the present tariff on butter.

We expect next year to be a very busy one in legislative work. Several new laws are proposed for consideration of the legislative bodies in the States in the Inter-State territory.

Dairy Council

Satisfactory progress is being made in the work of the Phliadelphia Inter-State Dairy Council in advertising the value of milk and in their Quality Control work. Figures show that the increase in consumption of milk has been from twelve to fourteen per cent. each year. We feel that they are doing some real work in the dairy interests.

National Milk Producers' Federation

This organization has made a marked advance in membership during this year. Butter and cheese organizations from the middlewest have become affiliated and it looks as though it was going to become the largest co-operative organization of its kind in the United States. We can frankly state that it is the largest federation of commodity organizations, at the present time, functioning anywhere in the world. It has a membership of over 300,000 and at a meeting held recently in Detroit, the feeling was extremely optomistic for the future.

The Inter-State Milk Producers' Review

The Milk Producers' Review is the official organ of your organization. It now has a circulation of 20,250, it should be read by every one of our members.

It contains many important reports of interest to the dairyman. Detailed milk prices in the association territory are printed monthly. Market conditions are reveiwed and readers may, through its columns, be better able to plan for the future.

Its support is largely from advertising and where ever possible, our readers should patronize these advertisers and also should not fail to advise the advertiser that they read the advertisement in the Milk Producers' Review.

Some of Our Year's Features

There are many other things that have come up during the year, which, of course, I cannot state in this brief report. I feel, however, that the most important of all is that of the butterfat differential.

The Guernsey Breeders' Association appointed a committee to confer with our organization in reference to a proposed

(Continued on page 13)

THE FARMERS' PART

Address at the Annual Meeting of the Inter-State Milk Producers Ass'n

Jos. A. Turner, Manager, Hollins College, Hollins, Virginia

Some people are inclined to be quite critical of any and all who venture to suggest any change in the status quo. Various convenient epithets are used rather vaguely and indiscriminately to describe those who depart in thought and in action from the beaten paths. The story is told of a little girl who called her brother a Bolshevist. The mother asked her why she called him a Bolshevist and she replied, "Because I don't like him." To all such critics I would state that a very large part of the progress of this world is due to those courageous ones who had opinions of their own and expressed them and who were not always satisfied with things as they found them and who set out deliberately to change them if they could.

I shall speak as plainly as I can about certain conditions in which the farmer finds himself. Because I think that these conditions are not all that they could be and should be.

Can we state very briefly the facts?

The Agricultural West has been developed very largely at the expense of the Agricultural East. No one can deny the marvelous development that our country has made since 1885, but the fact remains that the system put into operation in the sixties did as a matter of fact draw with irresistible force the farmers of the East to the virgin and free or near free lands of the West until farming in the East became, certainly in many localities, a lost art. It may have been worth the price—but I doubt it. The farmer of the East found it absoutely impossible to compete. The result was that very large numbers either went West or went into other lines of work.

That system is now a thing of the past. But there is another system still in operation and still working relentlessly. That system also had its beginning about the same time. I refer to the system which has gradually but with irresistible force drawn political and financial power from the country to the city and more the pity!—to a comparatively few cities. Not only power but actual people until we now find more people in the cities than in the country. This also may have been worth the price—but I doubt it.

And yet a third system has been and is in operation. As the result of this third system the farmer finds himself buying every manufactured article which he needs on a protected market, while he sells everything which he produces on an open market. The relief measures which have been undertaken have not accomplished anything worthwhile for the farmer. I do not believe that any legislation so far enacted or even suggested can bring relief. They are to a very large extent political remedies. The farmer's problem is not political—it is economic.

These are the facts as I see them. What are we going to do about it? We can not possibly turn back the pages of history, but we can do what we certainly did do prior to the sixties and what we have signally failed to do since—we can participate in and help in the making of the history.

Let us not imagine that progress will be rapid. This is no "presto change" proposition we are up against. It is a long and painful process through which we must patiently an constructively pass.

1. We must stop petting ourselves and grumbling about being the victim of circumstances. What is is and we might as well turn our faces from the forces which have brought us to our present state and turn them resolutely toward new forces which we shall help to create.

2. We must realize that everybody else has troubles too, that they are just as busy as we are and that they have neither the time nor the inclination nor indeed the obligation to work out our problems for us. It is primarily our problem and we might as well face the fact that we must work it out. But how?

I want to say that I can offer no remedy for the condition which I listed above as the third system and under which the farmer buys on a protected and sells on an open market. The roots of that system are deeper than alfalfa roots in a friendly soil. We will have to be content to leave to other generations the gradual adjustment of that gigantic problem. In the meantime there is much constructive work that we can do and the experience and knowledge which we will gain in the doing of it will without doubt make it possible for those who come after us to handle more effectively that larger and more complicated problem.

My remarks up to this point have been intended to apply to all farmers but from this point on I shall deal especially with the farmer who produces milk. What can the milk producers do. The remedies which I now suggest are within the reach of each of us right here and right now.

1. We should realize that we are producers of an indispensable article of food. We should take pride in so noble a calling.

2. We should realize that the public is entitled to this article clean and unadulterated and at the lowest price at which it can be produced at a profit to the producer.

3. We should learn how to produce milk in large quantities at a minimum overhead cost.

4. We should realize that we might as well try to operate the Pennsylvania Railway system with horses and mules as to try to develop a dairy herd with anything less than purebred dairy bulls and proved and selected cows.

5. Just as the great railway companies and the great manufacturing enterprises are constantly at work improving their machinery so should we by careful study and ceaseless effort improve our machinery—the cows. To have a herd of cows capable of producing large quantities of milk if properly handled and to hold them down to two-thirds or one-half their capacity by poor feeding and slip-shod management is just as bad and quite as impossible as trying to operate a railway locomotive with insufficient coal and with a section hand for an engineer.

6. We should know the individual and the total capacity of the herd and we should not only reach that but raise it higher.

7. We should learn to do what only an infinitesimal number of us are doing now—i. e. co-operate. We do not even guess at the meaning of the word.

8. We should be willing to employ trained men and women and put them into positions where they can find out for us the facts of the market and we should be willing to market our product under their direction. Here and there organizations such as the Inter-State Milk Producers Association are doing good work as far as we are willing to let them do it; but taking it by and large all of our organizations are more or less loosely formed, are upset by almost any unusual or unfavorable combination of circumstances and are without exception inadequately supported.

9. We should realize that we have a very large and a very perishable article which has to find practically a daily market. We should know by now that we cannot possibly profitably dispose of such a large product casually. What would the tobacco manufacturer amount to if he undertook to manufacture his article as we manufacture ours and to sell it as we sell ours?

10. We should know our present markets and get scientific estimates as to future markets. How many dairymen in the vicinity of how many cities have any idea as to the amount of milk in the aggregate their market will consume in a day or week or year? How many have any idea of what per capita consumption is—much less what it could be—if properly developed? We are not thinking in these terms. We are milking our cows, good, bad and indifferent, delivering our product big or little without an idea as to whether our market needs it or not, and complaining because we do not get, in most cases, cost of production. Down in my country every producer in a certain territory was warned every year for several years that during a stated three month period "averages" would be taken and that the average for those months would be used in figuring prices for the year. The warning was also sent out that our market had a surplus. Did we act accordingly? We did not. The record showed an increase each successive year for several years during those three months. The result was that the average price for every one of us was lowered. We do not seem to realize that the surplus largely determines the price for the regular supply. The most of us think our surplus will not be noticed and we perchance may profit thereby.

11. We should develop our business by advertising? How much are we willing to spend advertising so large a product? We do not speak the language of advertisers. There are concerns in this city which spend more in advertising goods, not so essential as ours, in a year than a dozen or so of our organizations spend in a dozen or so years. There are other concerns manufacturing articles from our raw product which spend more in a month than all the producers of that same raw product spend in a lifetime. And yet we wonder why the manufacturers succeed. Those manufacturers who succeed use business methods and those who do not fail. The difference is that the manufacturer has to make money or quit business, while we who are, if we did but know it, also manufacturers, do not have to quit. We take it out of the land, and our cows and our buildings and out of our own lives and the lives of our families. Thus we drag along, making a living and enjoying very many blessings which I do not want to make light of—but making very little real money which we can put into the bank to buy things with.

Yes, there are big questions and big problems before us. But the world does not owe us a living; we owe the world a life. We must face the facts. It is up to us to work out our own problems. We must adapt ourselves and our business to a system which can no longer operate on the old individualistic plan where every man was free to run his business exactly as he pleased and where every farm was to be a very large extent complete within itself. That time has passed forever. We must, if we would ascend rather than descend:

1. Use skill and science in feeding, breeding and management, and in maintaining proper sanitary conditions on the premises and in the herd.
2. Co-operate in letter and in spirit
   (a) With each other in bull associations and cow testing associations.
   (b) With distributors and manufacturers.
   (c) With the directors and officers of our organizations.
3. Employ trained men and women to develop for us the facts without which we cannot possibly act intelligently.
4. Follow expert advice as to what the markets available to us will consume and be willing to adjust our production pro rata accordingly—whether it is Up or Down.
5. Realize that "things" do not sell themselves except in very limited quantities and that judicious advertising will help develop larger and better markets.

When we shall have put these fundamental principles into action in some really large way we will then—and not until then—be in a position financially and by virtue of our training in co-operative effort, to under take that larger and more intricate problem of readjusting certain conditions which they fastened themselves upon us. Fundamentally sound principles must govern these adjustments—not quack remedies or artifical stimulants.

The highest guarantee—perhaps the only guarantee—which the State can make the citizen is: Life, liberty and the pursuit of happiness. These are large and comprehensive terms. The farmer should realize that any departure from this guarantee whether made in his interest or that of any other class or group is discrimination. The farmer should not ask for discrimination, but he should insist on the guarantee of life, liberty and the pursuit of happiness.

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Over 19,000 co-operating milk producers in Pennsylvania, New Jersey, Maryland and Deleware.

MUTILATED PAGE

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C. F. Preston
Albert Sarig
Frederick Shangle
R. I. Tussey
Harry B. Stewart
S. U. Troutman
F. M. Twining
A. B. Waddington
I. V. Otto

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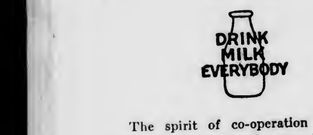
Editorial



The spirit of co-operation was the dominating factor in the annual business affairs at the annual meeting of the Inter-State Milk Producers Association, recently held in Philadelphia.

Over 400 delegates and members from the local organizations, throughout the Philadelphia Milk Shed, attended these meetings.

The various programs and policies of the Board of Directors and the executive committee of that board were approved.

New policies were promulgated for the future action and policies of the board.

There was apparent a general spirit of satisfaction that the organization had had a duty to perform during the past year—and that they had been successful in their policies and programs and in their method of carrying them out.

The future of the Inter-State Milk Producers' Association, looks particularly bright and if the same spirit of co-operation is maintained there will be no doubt as to the future success of the organization.

Quality and Quantity Control of the city milk supply. The effect of publicity work on consumption and its influence on the dairy industry from the viewpoint of supply as well as price, were outstanding features of the recent annual meeting of the National Co-operative Milk Producers' Federation, held last month in Detroit, Michigan.

From east to west, from north to south, delegates dwelled forcibly on these important factors. These delegates come from every important market in the country and represent practically every branch of the dairy industry.

Conditions of over supply, have shown their influence, not only in the fluid milk markets, but that of various other dairy products as well. These collectively have had an important influence on the price situation in many territories.

The annual meeting of this organization brought together the leading dairy co-operative marketing organizations of the United States and has done much through these meetings to inform the various organizations as to the others methods, markets and means of dealing with problems that arise and are of mutual interest.

$2,000,000 NEEDED TO FIGHT TUBERCULOSIS

The Pennsylvania Bureau of Animal Industry is being swamped by requests from herd owners throughout the State to have their cattle tuberculin tested. Because of adopting the area plan more than 22,000 herds are awaiting the test, according to a recent report by Dr. S. E. Bruner. At the rate these requests are coming in, it is estimated that owners of 600,000 cattle will want their herds placed on a tuberculine-free basis during the next two years. In order to satisfy their demands, pay indemnities and do the work efficiently, at least $2,000,000 is needed.

It is also pointed out by Department of Agricultural officials that while Pennsylvania ranks third among all the states in the value of her dairy products, and sixth in the total number of dairy cows, she ranks only fourteenth in the number of cattle under supervision for the prevention and eradication of tuberculosis. Unless tuberculosis eradiction work continues to progress in Pennsylvania as it is in the other leading dairy sections, the market for the State's dairy products and livestock will be decreased in favor of those states having less tuberculosis in their dairy herds.

COW TESTING ASSOCIATIONS INCREASING

The United States Department of Agriculture reports that on July 1st, there were 730 cow testing associations in active operation, as against 627 a year ago. This is a gain of more than 16 per cent the past year.

States of the central west made the greatest increase. Michigan ranks first in increased numbers of associations with a gain of 38. Minnesota is a close second with a gain of 35. Wisconsin with 163 still leads in the number of associations, followed by Michigan with 91, Minnesota, 90; Iowa, 61; and Pennsylvania, 37.

Crawford County with 4 associations leads the counties of Pennsylvania.

This increase in the number of cow testing associations is very encouraging. It means that year by year more of our dairy cows are being placed on yearly test. More testing means economical production and more economical production benefits both the producer and the consumer.

PRICE OF SILAGE

A good rule to follow in determining the price of silage—say authoritics in the Pennsylvania State College is based on one third the price of alfalfa or one third the price of mixed hay, plus ten per cent.

A formula, used at State College, is based on the price of corn per bushel, according to the following table.

Price Corn Per Bushel	Value of Silage
$ .70	$3.96
.80	4.40
.90	4.84
1.00	5.28
1.10	5.72
1.20	6.16
1.30	6.60

COLD WEATHER REQUIREMENTS

In most parts of the country the conditions under which milk is produced during the winter months are somewhat different from those encountered during the warm summer months. Whereas in summer the cattle are in the open part of the time, being in the barn only for milking, in winter the greater part of the time will find them in the barn. Under these conditions special attention should be given to those factors influencing the quality of milk that were not present during summer.

The health of the cattle is largely dependent upon proper ventilation. It is a common experience to find many stables with either too much or not enough ventilation during winter. Barns to be comfortable should be properly ventilated and at the same time not too cold. There are many expensive ways of admitting fresh air and leading off the impure air without sacrificing comfort. Fresh air and proper temperature are not antagonistic. Farmers' Bulletin 1393, "Principles of Dairy Barn Ventilation," gives specific directions on this matter. It will be sent free as long as the supply lasts. Write for it to the U. S. Department of Agriculture, Washington, D. C.

Clean cows are important in producing good-quality milk. When cows are stabled, more time and labor are necessary than under pasture conditions. This fact may properly be emphasized.

Poor-flavored milk may result from the method of feeding such feeds as silage, roots, kale, etc., during the winter. To be sure that such feeds will not unduly affect the flavor of the milk, feeding should be done within one hour after milking. Such practices will give better results than feeding before or at milking time. Flavors and odors of milk are very important factors in the commercial and economic phases of the dairy industry.

At this time of the year many producers may have abandoned the use of ice, or even cold water in cooling milk, thinking that the weather itself will sufficiently take care of the cooling. The use of a thermometer will show whether or not they are right. Prompt cooling of milk is important in the winter as well as in the summer.

PENNSYLVANIA COUNCIL TAKES ACTION ON FARM ISSUES

The Directors of the State Council of Agricultural Associations met in Harrisburg, November 11, and acted upon several important agricultural issues. Matters pertaining to taxation, rural education, rural electric service, the needs of the State Department of Agriculture, especially in regard to tuberculosis eradication and the control of serious plant insects and diseases, and the requirements of the Pennsylvania State College, particularly with respect to agricultural research, extension and teaching, were discussed at length.

Several committees were appointed by the council to investigate and make definite recommendations on special problems. A committee on taxation was named as follows: Fred Brenckman, Secretary of Pennsylvania State Grange; Robert F. Brinton, Chester County, and Robert M. Carrons, Washington County.

In order that the council might take definite steps in regard to the needs of Pennsylvania State College, especially in its agricultural work, the following committee was appointed to look into the requirements of that institution: Miles Horst, Lebanon county; Robert Garrahan, Luzerne county; Fred Brenckman, Dr. W. A. Haines, Bucks county; and Mrs. John F. Hice, Cambria county. These two committees will report to the council at its next meeting, which will likely be held some time during December.

A general committee was named to compile the various recommendations made by the several committees and the council at large for presentation to the agricultural commission appointed by the last Legislature. This general committee is composed of Morris Phillips, President of the Council; John A. McSparran, Master of State Grange; Miles Horst, Secretary of Pennsylvania Potato Growers Association; Robert Balderston, Secretary of the Inter-State Milk Producers' Association, and C. J. Tyson, director, State Horticultural Association.

The council also appointed a committee to draft a final statement on the damage to orchards and farm crops by wild life, especially deer, for presentation to the State Game Commission. This Committee consists of Chester J. Tyson, R. T. Crisswell, Franklin county, and Miles Horst.

FARM WAGES AND LABOR IN NEW JERSEY

The farm labor situation in New Jersey, reported under date of November 1st, was as follows: Supply 83 per cent. of normal; demand 88 per cent. of normal, making the potential supply 98.3 per cent. of normal, as compared with 97.8 per cent. on October 1st, 98.9 on September 1st and 77.8 per cent. on November 1st, 1923.

T. Pott Dome was horrified on Tuesday of last week, to find that the milk he had brought to the station in his Ford had all turned into butter. Mr. Dome says he will use it for transmission grease, an' he now calls his Lizzie "the milk maid."

65 Million Pound of Surplus Butter

What Are You Doing to Reduce This?

This tremendous surplus is having an unfavorable influence on your markets.

If every milk producer would increase the consumption of butter one half pound per week—and that the user of butter substitutes use butter in place of margarines, this surplus would rapidly decrease.

Patronize your own dairy industry by the use of a liberal supply of butter.

Butter for your health. There is no substitute for butter.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions under the Philadelphia Selling Plan again became effective with January, 1924. The same provisions will apply for next year. The basic quantity of all producers operating under this plan will be made during October, November and December. This average basic quantity will represent the basic quantities of respective producers during 1925.

All milk shipped during these three months will be paid for at the basic price.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

NOVEMBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

NOVEMBER BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity

Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

DECEMBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

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3.	$2.94	6.3
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3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
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251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37
November	6.3	2.37

NOVEMBER BUTTER PRICES

	92 Score Solid Packed Phila.	New York	Chicago
1	41	40 1/2	38 1/2
3	40 1/2	40 1/2	38 1/2
5	41	41	38 1/2
6	41	41	38 1/2
7	40 1/2	40	38 1/2
8	40 1/2	40	38 1/2
10	41	40 1/2	38 1/2
11	41	40 1/2	38 1/2
12	41 1/4	41	39
13	41 3/4	41 1/2	38 3/4
14	42 1/2	42	39 1/4
15	42 1/2	42	39 3/4
17	43	43	40 1/2
18	44	44	42
19	44	44	43 1/2
20	44	43 1/2	42
21	44	44 1/2	45
22	45	45	46
24	45	45 1/2	47 1/2
25	45 1/2	46 1/2	50
26	48	47 1/2	50 1/2
28	46	47	50 1/2
29	46	46 1/2	50

Feeds That Increase Your MILK CHECKS

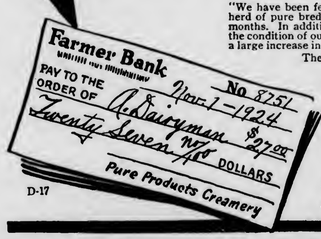
You will be surprised how your milk checks increase and the health conditions of your herd improve when you feed the "Old Reliable"

SUGARED Schumacher Feed and Boss Dairy Ration

Sugared Schumacher Feed (composed of Corn, Oats, Barley and Wheat products) is the greatest carbohydrate feed in the world. Finely ground and properly balanced with Oil Meal, Salt and Molasses, it makes a palatable, health-giving, body building ration which fits them for long and heavy milking periods.

Boss Dairy Ration with its 24% PROTEIN CONTENT furnishes abundant protein concentrates and increases their milk yields. Just give these two feeds a trial—you will soon see a marked improvement in your herd and also in your milk checks. Read this letter:

"We have been feeding your feed to our large herd of pure bred Guernseys for about three months. In addition to a big improvement in the condition of our cows, they have also shown a large increase in milk flow."
The Oaks Farm, Cohasset, Mass.



Your dealer can supply you.

The Quaker Oats Company
1665 Railway Exchange Bldg.
Address Chicago, U. S. A.

There is a surplus of about 65 million pounds of butter in storage. The use of an additional supply of butter by our members and the use of butter in place of butter substitutes would cut down this surplus and stabilize the dairy industry.

Over 1750 new members affiliated with the "Inter-State" during the past year.

Over 66,000 butter fat tests of member's milk made by the Testing Department during 1924.

SURPLUS PRICES
Monthly Surplus Prices
4% milk at all receiving stations

	1924 Average per month Class I	Class II
January	2.53	2.10
February	2.41	2.00
March	2.25	1.87
April	1.84	1.53
May	1.82	1.51
June	1.95	1.62
July	1.91	——
August	1.81	——
September	1.79	——

YORK COUNTY LEADS TON PORK PRODUCERS

York county led the Keystone state in number of hog litters, making a ton of pork in 180 days during the 1924 season, recently closed. Eleven litters in that county were successful in tipping the scales for 2000 or more pounds in the prescribed time, according to H. H. Havner, animal husbandry extension specialist of Pennsylvania State College.

Bucks county was second with six litters and Jefferson stood third with five. Indiana and Fayette counties tied for fourth place with four each, while Adams gained a clear title to fifth place with three qualifying litters. Centre, Clarion, Columbia, Lebanon, Somerset and Westmoreland had two each. Armstrong, Berks, Cambria, Erie, Franklin, Huntingdon, Lancaster, Luzerne, Mercer, Mifflin, Montgomery, Snyder and Union qualified with a single litter each.

National Co-operative Milk Producers Federation

ANNUAL MEETING IN DETROIT, MICH.

Standardization of quality and quantity of the milk supply of the United States was the outstanding feature of the discussion of the delegates attending the Eighth Annual Meeting of the National Co-operative Milk Producers' Federation, held in Detroit, Michigan, November 14th and 15th.

Over one hundred delegates from various milk, butter and cheese producing organizations, from different sections of the United States were in attendance at the meetings which were held at the Hotel Statler and at the Cass Technical High School.

Twenty-eight states and one foreign country were represented in the group. N. P. Hull, president of the Michigan Milk Producers' Association of Detroit, made the address welcoming the delegates to that city.

John D. Miller, president of the Federation in his annual address, sounded a warning to farmers of America that they must guard against legislation that would throttle co-operative marketing under the guise of assisting it.

"Each of the 28 member associations of this Federation is engaged in the co-operative marketing of milk and milk products. They are self-help organizations. They are the kind of organizations that the farmers desire, for the farmers created them. They are the results of years of effort and sacrifice, and most of them have now reached a stage of development that indicates that they have come to stay. Powerful interests have opposed them; powerful interests are now opposing them. In the early days, however, the opposition was in the open and the weapons used were those of a warrior.

"Now all this is changed. Those that have heretofore been open in their opposition now profess to recognize that the co-operative milk marketing associations have come to stay, and profess to approve of the general principles of such co-operative marketing.

"This does not mean that they are not as much opposed to your efforts as ever; it means that they are taking other ways to retard and obstruct your work and perhaps destroy your organizations. The methods they employ are adroit and insidious. They loudly profess approval of co-operative marketing but always disapprove of the particular organizations that the farmers have created for that purpose and they are seeking in various ways to so mould conditions that they may have a vote in the control of co-operative organizations.

"Against all these attempts the dairy associations as well as all others engaged in the collective marketing of farm crops should stand like a stone wall.

"If we interpret aright the thought and the purpose of the hosts of farmers making up the members of this Federation, it is that in self-help lies the remedy for agricultural ills.

"They recognize that as far as these ills are the result of federal statutes they may be remedied by statute. Speaking broadly, however, the ills are not statutory but economic. Being economic so must be the remedy.

"It may well be that the thousands of farmers' co-operative marketing associations of this country are now at the parting of the ways. Standing together as a unit they can defeat all proposed legislation, much of which, no matter how friendly the intent, would be most harmful.

"Farmers engaged in co-operative marketing are not seeking to repeal or suspend the law of supply and demand. Such law, however, does not translate itself into terms of prices. Someone must name a price if commodities are to be bought and sold. Farmers insist that they should have an influential voice in determining what price is dictated by the law of supply and demand.

"This law of supply and demand must then be applied at the right time and the right place. It should not be applied at points of production where there is always a surplus. In their co-operative efforts farmers are seeking to retain control of their products until they can be sold in markets where prices are determined by nation-wide and even world-wide supply and demand; or, if they surrender the control of their products before such markets are reached that the prices named shall reflect the values in consuming centers."

Discussing the various fights which the Federation has on hand in connection with tariff investigations by the U. S. Tariff Commission, Judge Miller said:

"This Federation has, of course, assumed the leadership in the present effort to maintain tariff rates on dairy products. Whatever may be said of the value of tariff rates on some other kind of farm products, tariff rates on dairy products have been distinctly benefical to the dairy interests of the country. Because of this the dairymen from California to Maine are viewing with unrest the determined efforts of other interests to cause a reduction in such rates.

"The hearing on the casein tariff rate has been concluded some time since and action of the Tariff Commission and of the President is awaited. If this decision be adverse, the only remaining remedy is to take the question into the courts or into Congress, or in both.

"Hearings have been scheduled before the Tariff Commission also on the tariff rates on butter and Swiss cheese. As the integrity and value of the schedule of tariff rates on dairy products are involved, it is recommended that in case of any adverse decision resort be had at once to the courts and, as soon as possible, to Congress.

FRIDAY AFTERNOON SESSION

This session began a series of addresses by representatives of the member organizations of the Federation, in which the programs and methods of the various associations were outlined and later discussed by the delegates.

R. W. Strong, secretary of the Ohio Farmers' Co-operative Milk Association outlined the policies of that organization in the Cleveland, Ohio, territory.

I. W. Heaps, secretary of the Maryland State Dairymen's Association outlined conditions in the Baltimore, Maryland, Milk Shed.

Frank G. Swoboda, manager of the Wisconsin Cheese Producers' Federation, Plymouth, Wisconsin, made an interesting address on Co-operative Cheese Marketing.

At the afternoon session addresses were made by:

J. C. Nears, secretary, Michigan Milk Producers' Association, Detroit, Michigan.

George W. Slocum, president, Dairymens' League Co-operative Association Inc., New York.

W. D. Schilling, president, Twin City Milk Producers' Association, St. Paul, Minn.

W. M. Cease, secretary, Farmers' Milk Producers' Association, Richmond, Virginia.

P. S. Brenneman, president, Dairymens' Co-operative Sales Company, Pittsburgh, Pa.

E. L. Nickle, Milk Producers' Association of Iowa, De Moines, Iowa.

H. D. Allebach, president, Inter-State Milk Producers' Association, Philadelphia, Pa.

C. E. Hough, general manager, Connecticut Milk Producers' Association, Hartford, Connecticut.

Professor Harner, State College of Wisconsin, Department of Economics.

Professor Oscar Urf, Professor of Dairying, Ohio State University, Columbus, Ohio.

BUSINESS SESSION

The business session of the Federation, including election of directors and officers was held at the Hotel Statler, on Friday evening.

Formal reports of the secretary, Chas. W. Holman and the treasurer, Frank P. Willits were presented.

The secretary's report embraced a very complete detail of the Federations legislative work, which included its activities in various matters, such as hearings before the Tariff Commission in the casien case, linseed oil case, involving rates on edible oils such as cotton seed, soya bean and cocoanut oils in competition with butter fat; the fairness of the eight cent butter fat tax, etc.

Formal reports of committees on the Educational Institute of Co-operation and the Temple of Agriculture were also received.

The budget committee, composed of Messrs. Hall, Brand and Milk presented the 1925 budget, which was approved.

The Resolutions Committee, Messrs. Balderston, Strong, Davis, Schilling and Nickle, presented among others the following resolutions which were unanimously adopted:

We deplore and view with unrest the various investigations by the Tariff Commission of tariff rates on dairy products. In the event that there should be a decision by the Commission adverse to the dairy industry, we call upon all farm and dairy organizations to act together with firmness and dispatch in laying the matter before Congress, and in taking before the courts the question of the constitutionality of the flexible provision of the tariff act.

We would urge the enactment of legislation providing permanently for a system of agricultural observers in important foreign markets and producing areas under the direct supervision of the United States Department of Agriculture, and reporting through it directly to our agricultural interests. We are most emphatically opposed to any movement to have these observers placed under the direction of any department or Governmental agency other than the Department of Agriculture.

This Federation pledges the President's Agricultural Commission its full measure of assistance in the securing of any information which it is in our power or that of our member associations to furnish, and which may prove helpful to it in the important task to which it has been called.

We are more and more impressed with the importance of a wider knowledge by our farm people of the economic and social principles upon which sound agricultural co-operation is founded. We would, therefore, pledge our most hearty support to the proposed Institute of Co-operation, and urge our member associations to co-operate in making it the outstanding success which the importance of the subject demands. In this connection we urge all our agricultural colleges to make proper and adequate opportunity to pursue the study of this important subject, receiving instructions in the practice and the theory of co-operation, as well as the economic background of a sound marketing system.

The annual election of directors for 1925 resulted as follows:

C. Bechtelheimer of Waterloo, Iowa, and W. F. Schilling of Northfield, Minn., were elected Directors in place of W. A. Carrier of Strawberry Point, Iowa, and J. G. Thompson of Landover, Md. The following Directors were re-elected: John D. Miller, Susquehanna, Pa.; J. A. Scollard, Chehalis, Wash.; George W. Slocum, New York City, N. Y.; Richard Pattee, Newton Highlands, Mass.; Harry Hartke, Covington, Ky.; G. R. Rice, Milwaukee, Wis.; F. G. Sweboda, Plymouth, Wis.; Frank P. Willits, Ward, Pa.; R. Smith Snader, New Windsor, Md.; C. E. Hough, Hartford, Conn.; P. S. Brenneman, Jefferson, Ohio; B. Ashcraft, Cleveland, Ohio; N. P. Hull, Lansing, Mich.; J. C. Burr, Wauseon, Ohio, and John Brandt, Litchfield, Minn. The delegates left four vacancies on the Board of Directors to be filled during the ensuing year.

The Executive Committee and Alternates were re-elected and consist of the following: John D. Miller, Richard Pattee, Harry Hartke, Frank P. Willits and N. P. Hull of the Executive Committee and G. R. Rice and C. E. Hough as Alternates.

All of the officers were re-elected. They consist of John D. Miller of Susquehanna, Pa., president; Richard Pattee of Newtown Highlands, Mass., First Vice President; Harry Hartke of Covington, Ky., Second Vice President; Frank P. Willits of Ward, Pa., Treasurer; and Charles W. Holman of Washington, D. C., Secretary.

The Directors confirmed previous action of the Executive Committee in admitting to membership the Twin City Milk Producers' Association of St. Paul, Minn. During the year just closed approximately 80,000 organized co-operative dairy farmers have been added to the membership of the National Federation through the addition of new member organizations. The Federation now represents twenty-five co-operative fluid milk marketing associations, two state-wide co-operative butter groups, and one co-operative cheese group operating in two states. The total membership of the Federation is estimated at 300,000 dairy farmers marketing annually nearly $400,000,000 worth of dairy products through their associations.

SATURDAY SESSION

This day's session was held in the Cass Technical High School Auditorium, the morning session being again given over to district reports.

John Brandt, president of the Minnesota Co-operative Creameries Association, St. Louis, Minn.

C. Bechtelheimer, secretary, Iowa Co-operative Creamery Secretaries' and Managers' Association, Waterloo, Iowa.

Richard Pattee, managing director, New England Milk Producers' Association, Boston, Mass., made an address

(Continued from page 12)

ELECTRIC FARM

Part of Farm Products Show Exhibit Harrisburg, Pa., January 19-23

An Electric Farm, a complete exhibition of the numerous electrical conveniences which the Giant Power Survey is desiring to bring to many farms throughout Pennsylvania, will be a new feature arranged in connection with the State Farm Products Show at Harrisburg, January 19-23, 1925. At least 70 different ways for farmers to use electricity will be displayed.

The J. Q. A. Rutherford homestead, a typical central Pennsylvania farm on the William Penn highway a few miles east of Harrisburg, was generously offered by its owner for this electrical exhibition.

This most unique way for displaying modern electrical home and farm appliances was decided upon at a recent meeting in Harrisburg attended by representatives of the Giant Power Survey, Pennsylvania Department of Agriculture, Pennsylvania State College, State Council of Agricultural Associations, Pennsylvania State Grange, Pennsylvania Electric Association, including the electrical equipment manufacturers and the Harrisburg Light and Power Company.

The Rutherford farm was selected by the committee after careful survey of a number of farms in the vicinity of Harrisburg. The farm is about 100 acres in size and the farmstead is rather typical of those found in central Pennsylvania. Being located on a State highway and easily reached from Harrisburg by street car, auto bus, or automobile were considered by the committee as favorable features.

The equipment committee has announced a list of at least 70 different electrical appliances that will be placed on the farm. Every conceivable kind of modern electric convenience applicable to farm life will be exhibited in the home and about the Rutherford farmstead. A laundry, kitchen, dining room, living room, bedroom and bathroom will be wired and lighted with electricity. Such conveniences as an electric washer, electric iron, dish washer, meat grinder, refrigerator, vacuum cleaner, electric toaster, waffle iron, and perculator will be displayed. Such house furnishings as an electric victrola, radio, sewing machine, and bed and dresser lamps will be on exhibition.

The electric current will be carried also to the poultry house, barn and sheds for lighting and for such purposes as running milking machine, feed grinder, cream separator, fanning mill, electric incubator and brooder, hay hoist, buzz saw and other implements.

"It is not supposed that any farmer will find it feasible or practicable to have all of these appliances on his farm." states Professor R. U. Blasingame, Pennsylvania State College. "The purpose of the Electric Farm is simply to show the possibilities of electricity on the farm. In order to do this with greatest convenience, the plan of completely equipping a typical Pennsylvania farmstead was devised."

This is the first time a complete exhibition of the uses of electricity on the farm has been arranged in Pennsylvania and even in the United States. The fact that it is being carried on in connection with the Farm Products Show will enable many thousand people from all parts of the State to see these most interesting recent developments in electrical farm conveniences.

Officials of the Giant Power Survey say that this Electric Farm is an illustration of what the Survey is desiring to bring to many farmers in Pennsylvania.

C. K. Steinmetz, of Harrisburg, was selected as director of the Electric Farm and the following general committee has charge of the arrangements for the exhibition: Frank P. Willits, Secretary of Agriculture, Chairman; R. U. Blasingame, Professor of Farm Machinery, Pennsylvania State College; M. T. Phillips, Chairman of State Council of Agricultural Associations; Judson C. Dickerman, Assistant Director of Giant Power Survey; Fred Brenckman, Secretary of Pennsylvania State Grange; H. R. Palmer, representing the Pennsylvania Electric Association and General Manager of Harrisburg Light and Power Company, and W. H. Horton, Jr., Chairman of Rural Service Committee, Pennsylvania Electric Association.

A Promise to Dairymen

The quality of Larro will never be lowered so long as Larro is made. Regardless of what changes take place in the price of ingredients, Larro will always remain the same.

LONG ago we decided upon this policy, and wrote this pledge into our manufacturing creed.

There were two reasons for this decision—we knew it to be correct, both in theory and practice, and we knew we could keep the promise.

Years of experiment and practical feeding have proved that a dairy feed must be more than just "a good feed." It must also be absolutely uniform and its formula must not be changed.

Sudden changes in feed—putting in more of this, or less of that, the substitution of poorer ingredients, imperfect blending or mixing—result in lower milk yield and smaller profits for the farmer.

Your cows do not eat a printed formula. They are not concerned with price changes. Whether the market is high or low, they need a feed that will build condition and keep milk flow at its peak.

The Larrowe Milling Company is able to keep its promise of uniformity and unchanging formula because it has the experience and equipment to manufacture a feed that never varies. It has a formula that can be depended upon to produce milk profitably. This formula will never be changed unless the Larro Research Farm proves that a better one has been found.

LARRO is *more* than a *good* feed; it is always the *same* feed.

We repeat that we shall continue to manufacture LARRO on this basis—the basis of more profit to those who buy it.

THE LARROWE MILLING COMPANY
DETROIT, MICHIGAN

Larro

684

THE SAFE RATION FOR DAIRY COWS

FINAL PLANS MADE FOR PENNSYLVANIA STATE FARM SHOW

Representatives of 25 leading farm organizations, Pennsylvania State College and the Pennsylvania Department of Agriculture met recently in Harrisburg and made final plans for the State's Ninth Annual State Farm Products Show. It was decided that the Show start Monday evening, January 19 instead of Tuesday as in previous years and extend through the week to Friday, January 23. The mass meeting will be held Monday evening.

A total of 86,000 square feet of floor space in buildings centrally located through the business district of Harrisburg, are already under contract for housing the Show, according to a report by Manager H. E. Klugh.

Assignments of exhibits have been made as follows: The poultry and egg show will occupy the Chestnut Street Market building. The exhibits of apple, potatoes, tobacco and apiary products will be on the second floor of the Emerson-Brantingham building. The swine show will be held in the Moto-Mart building and the dairy products on the first floor of the Emerson-Brantingham building. All the State educational exhibits will be arranged at the Rendezvous Ballroom.

Assignments for meeting places of all the farm organizations were also made. Numerous halls and auditoriums throughout the business section of the city have been secured for these meetings.

Health Recipes

A COOK BOOK

Containing methods of using the health-protecting foods, milk and its products, fruits and vegetables

"Health Recipes" has thirty-six colored illustrations, and contains more than one hundred and seventy-five recipes in addition to seasonal menus.

This book will be useful to teachers of cookery and homemakers. It is so arranged that it may be retained as a complete book, or separated into forty-five cards to fit into a standard size recipe box file.

Single Copies, 50c Postpaid

Special Price to Inter-State Milk Producers' Association Members

25c Postpaid

At this season of the year we suggest "Health Recipes" as a most gracious Christmas greeting

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

REPORT OF THE FIELD AND TESTING DEPARTMENTS

By FRANK M. TWINING

The year's work just finished by the Field and Testing Department of your association has been a particularly interesting and busy one. We have endeavored to make at least eight butter fat tests for each member whose milk is sold with reference to the butter fat content and who pays commission, making approximately 66,000 samples tested and reported to our members by postal card during the year. In addition we have made many special investigations when we found conditions that we felt warranted our doing so or at the request of individual members and secretaries of locals.

We are glad to state that a large number of Receiving Stations have come thru the years investigations with 100% perfect score. The average number of testing errors corrected has been about 5%. The highest percentage of errors was found on one investigation where 49% of the tests were incorrect.

We have had excellent co-operation from receiving station managers and buyers in making proper adjustments when our men have called to their attention mistakes in testing and weighing.

We have found fewer decomposed samples, leaky weight tanks and faulty weight scales this year than last. Several sets of scales have been found one or two pounds off, the greatest discrepancy being one set that were 17 pounds short on each delivery of milk over one hundred (100) pounds.

Losses in Test

More cases have been reported this year than ever before of considerable loss in butter fat to our members from loose fitting can covers, cream frozen to can covers and milk delivered to buyers in a partially churned condition.

Wet parchment paper placed over can tops before putting on the can covers will help to prevent all three losses. Where milk is hauled a long distance by motor truck or over rough roads without first being thoroughly cooled it is almost certain to churn. In some cases in hot weather it is necessary that milk trucks be iced.

Herd Tests

There has been a constantly growing tendency by some buyers to increase the minimum butter fat requirement which has at times jeopardized the market of some of our members.

This department has helped those members so affected by furnishing outfits for taking samples of individual cows to eliminate the abnormally low testers from their herds.

State Testers Conference

Early in the year we held a conference in our office, with the representatives of the state departments of agriculture of Penna., New Jersey and Maryland, and were assured of their hearty co-operation in enforcing the laws relating to the operation of the Babcock test in their respective states.

Organization

Of the 1750 new membership contracts added to our roll during the past year over 95% have been secured by the field department. In addition to the regular individual organization work done by our men between test periods, twelve carefully planned organization drives have been carried out in different territories by the organization department with the assistance of County Agents, local officers and leading men of these communities. The drive method of getting new members has proven somewhat more efficient than the individual method. Seventy-one (71)% of the prospects approached on drives have signed contracts on the first visit against 56% signed by the individual method.

In those territories covered by the drives the percentage of membership has been increased from approximately 35% before the drives to 65 per cent. after the territories were thoroughly canvassed. Some of those territories that were formerly the most poorly organized have now become, since our men have demonstrated that the association is alive and growing institution, the best organized and the most loyal boosters we have.

It is pleasing to note that all our men being in very close touch with our members, report a general good feeling throughout the territory and particularly in those territories bordering on other markets.

There have been fourteen men employed in this department the past year, never more than nine at a time.

It is the desire of this department to be of worth while service to the members of the Inter-State Milk Producers' Association. Every fieldman is conscious of his responsibility and ready at all times to give his best to the department in the interest of the entire membership.

CHEAPEN THE RATION

Present indications point to high grain and forage costs this fall and winter. Corn is already mounting and with a short hay crop in many sections, we can look for high priced forage. This means it will be necessary to practice economy in feeding. The live stock keeper, as a rule, loses or gains according to his knowledge and method of feeding.

Silage is the best substitute for both hay and pasture and it should be used to the limit. The cheapest forage is in the form of silage and as it is a bulky ration should be grown on the farm and supplied in liberal quantities.

A good many of our stock keepers will find themselves short on forage and hay which will mean that they must either purchase or produce a substitute. Why not put up another silo and fill it with corn grown on the farm or purchased from the neighbor? As much of our corn is late, it looks as though it might be lost by an early frost. Such fields can be purchased at a low price, owing to this threatened danger and the crop can be insured with a silo.

Silage will lower the cost of the ration, make sure a profit from the live stock and greatly increase the value of the crops. As a rule, a silo will pay for itself the first year. What other farm investment will pay 100 per cent,? Competition now demands economical feeding.

A. L. Haecker.

EIGHTH ANNUAL MEETING

Inter-State Milk Producers' Association, December 1-2, 1924

(Continued from page 1)

After a circulation of the ballot, the tellers found the following candidates to have been elected. C. I. Preston, A. R. Marvel; F. M. Twining; R. I. Tussey; J. A. Poorbaugh; Frederick Shangle; J. H. Bennitch and I. V. Otto. These directors were elected to serve for a term of three years.

During the remainder of the morning session various problems were discussed. The merits of the semi-monthly payment by buyers of milk was considered. The proposition to establish a standard price of 3.5 per cent butter fat milk content, with a differential of 5 cents. up or down, was also considered and the 3.5 standard was fixed as the basis, for purposes of calculation for fluid milk in establishing the association price.

Over 300 official delegates attended the morning session.

Afternoon Session

The Monday afternoon session was presided over by Frederick Shangle, vice president.

The annual address of the president, H. D. Allebach, outlined the progress of the association during the past year. (Printed elsewhere in this issue.)

Secretary R. W. Balderston, of the Philadelphia Inter-State Dairy Council, presented the annual report of the work of that organization. Mr. Balderston presented detailed statistics of the years work, outlining the program of the various departments of the council work. (This report will be printed in full in an early issue of the "Review.")

C. E. Hough, manager of the Connecticut Milk Producers' Association, Hartford, Conn., made an interesting address on the "Co-operative Milk Marketing Methods in Connecticut." Mr. Hough made a most interesting address outlining the methods and plans adopted and followed in the marketing of milk in that territory. The surplus plan in use in that district was explained in detail as were the marketing conditions under which the association operated.

The committee on resolutions presented the following report, which was unanimously adopted:

1. Be it resolved that the Inter-State Milk Producers' Association go on record as approving the work and furthering the use of dairy products on the farm and further be it resolved that each and every member of the Inter-State Milk Producers' Association absolutely refrain from using on his farm substitutes for milk and its products.

2. Be it resolved that all local associations in Pennsylvania forward their checks immediately to H. D. Allebach, Treasurer, so that the Rural Electric Service Committee can further investigate the higher rates of farm lights and power.

3. Be it resolved that in view of the fact that the farm people are very much in need of a wider knowledge of sound co-operative principles that we go on record favoring the establishment of the proposed institure of co-operation and urge our local associations to support this movement and in this connection urge our Agricultural Colleges to provide proper and adequate opportunities for all students who wish to pursue studies on this important subject so that in the future we may have leaders who are well trained in the theory of co-operation that will bring us a sound marketing system.

4. Be it resolved that the Inter-State Milk Producers' Association heartily approves the splendid work that has already been done to eradicate tuberculosis among dairy cattle and that this association as a body and every local connected therewith impress upon the legislators of the different states the need to appropriate all money possible for this work and be it further resolved that this association aprove a regulation requiring all dairy herds to be tuberculin tested.

5. In view of the fact that many farmers inexperienced in the dairy business during this time of depression are looking to the dairy business as a possible way of getting them out of debt that this association deplore, as economically unsound, any artificial stimulation of the extention of the dairy business and that we co-operate with such territories bringing them facts relative to this specialized industry in order that no such farmers be ill-advised relative to entering the dairy business with the hope of finding success.

6. Resolved that the Inter-State Milk Producers' Association heartily supports the position of the National Co-operative Milk Producers' Federation in supporting the present tariff on dairy products and urging that the Association officers and their various locals make every effort to see that this is done, and a copy of the resolution be sent to our representatives in Congress and the Senate.

7. Be it resolved that the Inter-State Milk Producers' Association go on record favoring the enactment of legislation that will provide for a system of Agricultural observers in important foreign markets and producing areas, to be under the direct supervision of the department of Agriculture and reporting that we are opposed to any movement through it directly to our agricultural interests. Be it further resolved that we are opposed to any movement that will place foreign observors under any other department of governmental agency other than the United States Department of Agriculture.

8. Be it resolved that the Inter-State Milk Producers' Association reaffirm the following resolution, relative to governmental interference with co-operatives that were passed by the National Co-operative Milk Federation at their recent meeting in Milwaukee. Resolved that it shall be a general policy of the Inter-State Milk Producers' Association to condemn and oppose the governmental subsidies for enterprises of a private character and the means of boards or commissions and the officers of the Inter-State Milk Producers' Association are instructed to oppose all efforts which tend to such ends unless specific exceptions are made to this rule by regular or special meetings of delegates, directors, or the Executive Committee.

Sixth Annual Banquet

Over 460 attended the annual banquet which was held in the Adelphia Hotel, Monday December 1st.

Frederick Shangle, acted as toastmaster and brief addresses were made by Dr. Wilmer Krusen, Director of Public Health, Philadelphia; Dr. A. J. Gerson, associate superintendent, Philadelphia Public Schools. Madge T. Bogart, Prof. of Home Economics Extension, State College, Pa.; Joseph A. Turner, Hollins College, Hollins, Virginia; C. E. Hough, Manager, Connecticut Milk Producers' Association and E. J. Cattell, Chamber of Commerce, Philadelphia, Pa.

The entertainment was furnished largely under the direction of the Philadelphia Inter State Dairy Council.

The "Scarecrow" a new health play was presented by children of the seventh grade of the Glen-Nor High School, Norwood, Delaware County, Penna.

"The Dance of the Peasants" by members of the Dairy Council Staff. "I've a Dairy Farm in Holland" by members of the Milk Producers' and the Dairy Council Staffs. The "Cow Pound Quartette" of Nassau, Delaware, and the "Quality Control Octette" presented vocal selections.

Tuesdays Session

Tuesdays session opened with visits to ice cream making and milk distribution plants in Philadelphia. Groups numbering upwards of 70 made these visits under the direction of Robert F. Brinton.

The meeting, held in the Gold Room of the Adelphia Hotel, was largely given over to addresses.

Charles W. Holman, secretary of the National Co-operative Milk Producers' Federation, Washington, D. C., who spoke on "The Institute of Co-operation".

Dr. Wilmer Krusen, Director of the Philadelphia Department of Health, "Philadelphia Milk Supply."

Prof. E. B. Fitts, State College, Pa., "Marketing Organizations and Tuberculosis Eradication."

Joseph A. Turner, manager of Hollins College Hollins, Va., "The Farmers' Part".

Ladies' Entertainment

The ladies attending the annual meeting were entertained on Monday in the offices of the Inter-State Milk Producers' Association, in the Boyertown Building. Over fifty ladies attended. The program which was in charge of the Philadelphia Inter-State Dairy Council included addresses by Dr. Hannah McK. Lyons, Aubyn Chin, and Louise Elmore Northup. A demonstration lunchen was served by the Nutrition Department under the direction of Louise Elmore Northup.

Officers for 1925

The directors of the association held an organization meeting on Monday evening, at which routine business was transacted.

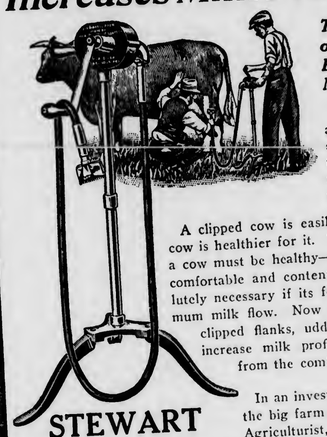
The officers for the current year are as follows: President, H. D. Allebach, Montgomery County, Pa.; vice president, Frederick Shangle, Mercer County, N. J. treasurer, Robert F. Brinton, Chester County, Pa.; secretary, Robert W. Balderston, Delaware County, Pa.

"Are there any vitamines in that spinach?" asks Aunt Sophrony Geers, our prize old maid, to Late Offen, proprietor of th' Elite Restaurant, meals at all hours, etc.

"Well," replied Late, 'p'raps there is, but we aim ter wash it as careful as possible."

Fretting is like a rocking chair; you can do a great deal of agitating in it without getting anywhere.

How Clipping Cows' Flanks and Udders *Increases Milk Production*



The first of a series of articles on Better and Bigger Milk Production.

Both here and abroad, farmers and dairymen have found that clipped cows give more milk, richer milk and cleaner milk.

A clipped cow is easily kept clean and the cow is healthier for it. To give the most milk a cow must be healthy—only then does it feel comfortable and contented—a condition absolutely necessary if its feed is to induce maximum milk flow. Now during stable months, clipped flanks, udder and underline will increase milk profits without detracting from the comfort of the cow.

In an investigation on cow clipping the big farm journal, The Wisconsin Agriculturist, was informed by Prof. Hulce, of the University of Wisconsin, that "there is European information to the effect that clipping cows increases milk production about 8%."

To clip a cow requires very little time—and then the cow is cleaned thoroughly merely by wiping with a damp cloth.

STEWART

No. 1 Ball Bearing Clipping Machine

The best made. It's ball bearing. Turns easy. Strong, sturdy and lasting. Anyone can do a good job with it. Easily moved about. Equipped with our latest model B-1 clipping head and new process Stewart cutting plates. Has flexible shaft 6 feet long. Clips cows, horses, mules and other livestock without changing. Price f. o. b. Chicago, $14.00.

CHICAGO FLEXIBLE SHAFT COMPANY
5564 Roosevelt Road Chicago, Illinois
World's Largest Makers of Clipping and Shearing Machinery

QUALITY CONTROL DEPARTMENT

Annual Report by C. I. Cohee, Director

During the past year the work of the Quality Control Department has largely been given to the inspection and enforcement measures of the new sanitary regulations adopted at the last Annual Meeting of the Inter-State Milk Producers' Association, in which the Quality Control Department was named as the enforcing body.

A large amount of sediment testing, educational and special field work has also been taken care of by the department forces.

Field Force

The force of workers in the Quality Control Department has been enlarged to more adequately handle the increased work resulting from the enforcing of the regulations. Farm-raised men, trained in recognized colleges particularly fitting them for this work, have been engaged. So successful have they been in their work that very few complaints have been made regarding their methods. A friendly attitude has been maintained between our workers and the producers of milk, resulting in a far better feeling than would have been followed had force been resorted to in the inspection work.

Inspection Work

The actual work of inspecting the dairies, receiving stations and city distribution plants began in March, 1924, and has been very vigorously carried on thruout the remainder of the year. Over 12,000 farms have been inspected and approximately 200 dairies have been discontinued from selling milk to dealers co-operating with the Dairy Council. In many instances such farmers have disposed of their herds—dirty conditions about the stables and failure to provide proper equipment for sanitary dairying being the chief reasons for discontinuing the majority of these dairies. It is impossible at this time to accurately estimate the improvements made on the vast number of farms inspected, but our records indicate that over 2,000 new milk houses have been built since April 1, 1924.

Country Receiving Stations

We have inspected 110 country receiving stations, of which 28 have made—or are now making—improvements requiring the expenditure of over $2,000 each. Two receiving stations have been condemned and closed. Two other receiving stations have been condemned and will be closed in the very near future.

Development of Public Health

We have received 175 complaints of milk from the Department of Public Health, largely because of high bacteria count or dirty milk. Of those received, 125 have been investigated by the Quality Control Department and changes recommended either in methods or equipment to correct the complaint. In a number of cases complaint has been made upon milk consigned to non-cooperating dealers, in which case the Quality Control Department lacks the authority to correct the conditions.

Office Record System

A complete system of records covering every producer shipping milk under the Sanitary Regulations is maintained in the office. These records show the conditions of the milk shipped—clean or dirty, watered, flavor, etc. Records of all changes in the farmer's delivery of milk, and of each individual farm, is maintained. These records furnish a very complete system for guidence, not only in the office but in the field as well.

Publicity

A campaign of publicity has been carried on in the city and country newspapers and the Milk Producers' Review, acquainting the milk producers with the requirements of the Sanitary Regulations.

Meetings

Milk improvement meetings have been held thruout the entire Philadelphia Milk Shed at which workers from this department gave talks on "How to Produce Clean Milk" and "How to Care for the Milk After it is Produced." Questions pertaining to the Sanitary Regulations were explained and producers were advised of the requirements necessary on the farms and in the milk plants to safeguard the milk if increased consumption by the public was to be expected. We held 163 such meetings during the past year, with an attendance of 14,321 producers.

Other Activities

Special effort has been made in some districts in an attempt to have the milk delivered at a lower temperature; steps have been taken to assure the protection of milk while on trucks by properly covering the cans; truck schedules have been arranged and producers' milk assembled on conveniently located platforms, thus eliminating unnecessary stops for the truck, in an effort to facilitate the prompt delivery of milk in good condition. Assistance has been rendered to a great many producers who have contemplated building dairy barns, milk houses, etc. and in many cases of high bacteria count, presence of garlic, garget ropy milk and other complaints with reference to the quality of the milk. In every case where a producer has asked for personal assistance the appeal has been responded to promptly.

Exhibits

Milk improvement exhibits have been prepared and displayed at various farmers' picnics, farm products shows and gatherings of a similar nature. An extensive exhibit was prepared for the National Dairy Show at Milwaukee and two workers were in constant attendance to explain the details of the exhibit to the visitors interested. Our workers were employed 67 man days at fairs and exhibits.

Milk Contests

Assistance has been given two communities in conducting milk contests. Aid has been given in the preparation of samples, displaying them at shows, and assistance given in the judging of entries. In one such milk contest nearly every producer selling liquid milk in the county—numbering over 400—was entered.

Demonstrations

Public demonstrations have been given in a number of communities at which our workers prepared the cows for milking, did the milking, cared for the milk and cleaned the utensils, doing the work in an approved manner and asking the producers who attended the demonstration to follow the same methods.

Sediment Testing

Sediment testing has been carried on at points where the dealer has failed to establish methods of determining whether the milk offered by the producer is clean. During the year we made 16,283 such sediment tests.

Speakers Furnished

Speakers from the Quality Control Department have made addresses before Kiwanis, Rotary, Lion's and other luncheon clubs. Addresses have also been made before meetings of business men, school nurses, milk wagon drivers and many other interesting groups.

During the past year the Quality Control workers have traveled 107,622 miles and have engaged in almost every conceivable kind of milk improvement work, much of which cannot be tabulated in the form of an annual report.

The foregoing report gives a general idea of the work of the Quality Control Department. What has been accomplished by this cooperative method may be summarized in the report of one distributor—at one station where at times from two to three thousand pounds of milk per day was rejected in former years because of being sour, during the past year it was seldom necessary to reject more than two or three hundred pounds daily. In many cases the cost of meeting the regulations has been more than paid for by the reduced loss from rejected milk.

COLLECTS DATA ON FARMERS' EXPERIENCES WITH TRUCKS

The efficiency of the motor truck on the farm has been the subject of considerable conversation among farmers. When a farmer contemplates the purchase of a machine and is undecided as to its practicability for his use, the experiences of other farmers who have owned and used that particular kind of a machine should be valuable, says the United States Department of Agriculture. Accordingly, the department has gathered the opinions and other more definite information from a large number of motor-truck users over various parts of the country.

Among the outstanding facts suggested by analyzing the data collected may be suggested the following:

The use of a motor truck in many instances enables a farmer to take advantage of better markets at greater distances from his farm than were available when his hauling was done with horses. For those truck owners who have changed markets the distance to the new markets averaged nearly double the distance to those formerly used.

In the area covered by these reports trucks having a capacity of 1 ton comprised nearly half the total number concerning which replies were received, while slightly over half of the owners who in1922 gave their opinions as to the size best suited for their conditions stated they perferred the 1-ton machines.

Over 90 per cent of the owners stated they believed their trucks would prove to be profitable investments, and that they intended to purchase others when those reported had worn out.

Saving of time was given as the greatest advantage and poor roads as the greatest disadvantage connected with the use of motor trucks.

On the average it requires less than half the time to make a haul of a given length with a truck than it does with horses.

Not all of the road hauling was done with trucks. Over 60 per cent of the owners answering this question stated that they used horses for a small part of their road hauling.

While many owners used their machines for some hauling on the farm itself a large part of such hauling was still done with horses.

A small percentage of the owners stated that they did some custom work, but that it constituted on the average only about one-tenth of the total hauling done with their machines.

PENN YLVANIA COW TESTING ASSOCIATIONS

The following table gives the records of Cow Testing Associations in Pennsylvania, reporting to the Division of Agricultural Extension, at State College, Pa.

Twenty-nine associations reported for the month of September, embracing 8,586 cows testing of which 462 were giving more than 40 pounds fat and 724 giving more than 1000 pounds of milk.

Name of Association	Cows Tested	Cows 40 lbs. Fat	Producing 1000 lbs. M
Bedford County	303	12	4
Butler County	454	29	25
Centre County No. 1	250	6	16
Clarion County	252	10	11
Coventry (Chester)	460	28	14
Cumberland County	282	39	65
East Junita	269	15	46
Eastern Cambridge	253	2	1
Edinboro (Erie)	346	14	47
Garden Spot	296	15	27
Goodville	102	14	36
Laurel Hiss	322	10	10
Lehigh County	306	12	20
Mercer County No. 3	418	32	30
Meadville	314	7	8
Mifflin County	303	16	36
Montgomery	344	13	26
Montour Valley	405	4	43
Northern Berks	325	15	48
Perry County	248	15	31
Southern Wayne	489	11	18
Sullivan County	311	9	17
Troy	425	14	14
Uwchland	606	29	16
Ulysses	317	2	2
Venango County	469	29	47
Warren-Elk	245	17	23
Washington County	422	17	23
West Crawford No. 2	334	8	20

In addition to the above 40 lbs. list, 113 cows gave more than 50 lbs. fat, and 318 cows gave more than 1200 lbs. milk.There are 27 cows reported on official test. 152 unprofitable cows were sold during the month and one bull purchased.

The three highest individual cows in milk production made 2,679, 2,472 and 2,373 pounds respectively.

GLEANINGS FROM THE FIELD

SUMMARY OF YEARS MEMBERSHIP DRIVE WORK

In November, of 1923, local campaigns were adopted as a method of organization. During the period of one year which has elapsed since that time, twelve drives have been run. The same plan was followed in conducting each drive, preliminary letters to non-members, and as thoroughly a canvass of a local section as was practical, being the outstanding features of the work. One man has been working on organization the greater part of his time and other field men have assisted in canvasses between testing period whenever they could conveniently spare the time and when it was practical for them to get to the drive area.

Drives have been conducted in the following localities: Delaware-Chester counties, Pa.; Hagerstown, Md.; Harrington, Del.; Hurlock, Md.; Newark, Del.; Chestertown, Md.; Southern New Jersey; Queen Anne county, Md.; Juniata county, Pa., and Franklin county, Pa.

The number of new members signed by this drive method has totaled approximately 1,000 dairymen and represents over 8,000 cows, a herd average of about 8 cows. The total number certificates of membership issued by the Inter-State Milk Producers' Association during this period was 2,115. The drives for members have brought in almost fifty per cent. of the new members signed in the past year. Canvassing by field men in sections where drives have not been held, unsolicited members, meetings, and members solicited by old members, directors and officers, have accounted for new members not signed by drives.

Membership drives, as conducted during the past year, have proven an efficient means of organization. Records show that in drive areas canvassers have turned in as members a larger percentage of the dairymen called upon than in sections where no campaigns were organized. The advantages of the drive method as pointed out by the year's experience might be enumerated as follows:

1. Preliminary contact obtained by letters.
2. Drive area routed for efficient canvassing.
3. Local difficulties adjusted previous to canvassing.
4. Competition between canvassers induce better results.

The disadvantages arising from the use of this plan have come largely from inconvenience in obtaining field men when needed because of ofter demands upon their time. This has necessarily limited the number and scope of the drives which have been conducted.

The underlying aims of the drive work have pointed, in the main, at two ends. These are: first, to establish a moderate organization service for the maintenance of membership, and second to develop a definite personal contact service between the executives and the dairymen members.

It is with a feeling of confidence in the dairymen's ability to meet and work out his marketing problems that we point to the response these drives have obtained. In practically every territory, about 75% of the farmers called upon demonstrated their belief in co-operative marketing by the very practical method of becoming an association member. In no territory was a drive conducted which could be called a failure. In some sections the response was practically 100%. This remarkable willingness to co-operate in a movement toward dependable and protected marketing system has made the work a pleasant and satisfying experience for the men in the field.

USEFULNESS OF DAIRY BULL IS INFLUENCED BY RATIONS

One of the most important aims of the dairyman should be to have the services of a good, well bred bull, says the United States Department of Agriculture, and then, having a good bull, he should be given the care and management that will insure the greatest profit from him. He should be so fed and exercised as to maintain his activity and healthy, vigorous condition.

The amount of grain to feed to dairy sires varies from 4 to 10 pounds, depending on the size and condition of the animal and the kind of roughage. A grain mixture recommended by the department as having been used with success consists of 3 parts ground corn (by weight), 2 parts ground oats, 2 parts wheat bran, and 1 part linseed meal. Another mixture suggested consists of 3 parts ground oats, 2 parts wheat bran, 1 part ground corn or barley, and 1 part linseed meal.

Ground oats are considered especially valuable for bulls. Cottonseed meal is not usually regarded with favor, especially when fed in large amounts. Some breeders think it causes impotency.

On some farms the bulls are given the spoiled or musty hay or waste feed left by other animals. This is poor practice. It is just as necessary to feed the bulls properly as the cows. The legume hays—alfalfa, clover, vetch, soy bean, cowpea—are excellent roughage, and should be fed liberally if possible. If the non-leguminous roughages, such as timothy or prarie hay, corn silage, stover, or fodder are fed ,a grain mixture higher in protein should be used .

Breeders differ as to the advisability of feeding silage. Some maintain that a considerable amount of silage is likely to lesson the vigor of the bull and make him sterile. Others feed silage in large quantities and report no undesirable results. So far as experimental work shows, it is probable that silage does not have any direct effect on the breeding powers. Large amounts of silage, or other extremely bulky feeds, may have a tendancy to distend the paunch so that the bull becomes too heavy on his feet. From 10 to 15 pounds of silage a day with other roughages can be fed safely without impairing the usefulness of the animal.

Dairy bulls should have plenty of water. This matter is often neglected, especially when there is not a constant supply in the stall or pen and when the bull is difficult to handle. A bull should be watered at least once a day during the winter and twice a day during the summer.

PATRONIZE OUR ADVERTISERS

Lewis Genuine Linseed Meal

Excels as a STOCK FEED

Prolongs LACTATION

BALANCE YOUR WINTER FEED WITH LEWIS MEAL

Manufactured by

John T. Lewis & Bros. Company

705 Lafayette Building, Philadelphia

Manufacturers of DUTCH BOY Paint Products

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.

Her Owner
"Wouldn't think of getting along without"
KOW-KARE

M. G. Welch & Son, Burke, N. Y., owners of this Champion Ayrshire write us, *"We have used Kow-Kare in our herd for years and would not think of getting along without it. We consider it the best cow tonic known."*

COW owners who have made the business of dairying for profit a close study know that they cannot leave the health of their milch cows to chance. The average dairy cow is "forced" to get every last ounce of milk year in and year out—a tremendous strain on the most robust physical system.

During the winter months, especially, the added strain of digesting quantities of dry feeds puts a severe test on the milk-making organs. Small wonder they become sluggish, fail to keep up a profitable yield or even become the prey of disease.

Invigorate the Milk-Making Organs

Kow-Kare is a medicine-tonic that acts directly on the milk-making functions—the organs where all cow diseases start. It eliminates such common cow disorders as Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, etc., by causing the organs of assimilation and reproduction to function normally and thrive on nature's foods.

Kow-Kare has a definite action in increasing the milk yield through this invigorating action on the milk-making organs. It enables the cow to turn into milk ALL the milk values in the feed she consumes.

Try feeding Kow-Kare this winter and you'll never again be without it. A tablespoonful twice a day, one week in each month is the feeding plan most often followed. The return in added milk-income and freedom from disease will pay you a hundred-fold.

Our free book, *"The Home Cow Doctor,"* tells all about treating all cow diseases—besides giving a wealth of valuable information on general dairy topics. Send for your copy today.

Always in this can

Sold by feed dealers general stores druggists—
Large size $1.25
Medium 65c

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vt.

OUR OGANIZATION POLICIES

Address of President H. D. Allebach at the Annual Meeting of the National Co-operative Milk Producers' Federation

The Inter-State Milk Producers' Association in its development from a loosely knit organization in 1916, to its present situation with 250 locals scattered throughout 40 counties in the states of Pennsylvania, New Jersey, Maryland and Delaware, has taken a number of definite advance steps in caring for the sale of its member's milk, 85% of which is used in fluid consumption. I will refer briefly to only a few of them.

(1) The Philadelphia selling plan, a form of the so-called surplus selling plan.

(2) The stabilization of prices in the various cities throughout the Philadelphia Milk Shed.

(3) The development of the weighing and check testing service to our members.

(4) The co-operative quality improvement program.

(5) Advertising the food value of milk through Dairy Council activities.

The Philadelphia Selling Plan

Our Association early faced the difficulty of wide seasonable variation in supply. To overcome the embarrassment of too much milk at one time and too little at another to supply the needs of our consumers, a plan was evolved and put into effect in January, 1920. Our members in four years have changed their production methods that during the past twelve months the supply has not varied more than 12% from the expected demands. Previous to 1920 the surplus during the early summer was 50% above the needs of our market. In some receiving stations the summer production was five times what it was in the fall and winter. During this same period, October, November and December, our farmers were unable to supply all the milk needed in the city and it became necessary for our dealers to go outside the territory to make up the deficiency.

This sales method has resulted in a stabilization of price throughout the year. We have been able through it to adjust the situation so that price changes have only been made when general world conditions warranted it. We have been able to satisfy our members that the average price which they received has been much better than was possible under the old system of a flat price with wide fluctuations month by month.

Stabilization of Price

In many cities throughout the Philadelphia Milk Shed varying in size from 5,000 to over 10,000, the Association has adjusted a fluid milk price differential using the Philadelphia price as a basis so that at the present time every price change in Philadelphia automatically adjusts the price in outlying territories. The differential between the price in Philadelphia and in these cities is usually based on the cost of transporting milk from that town to Philadelphia. When the local supply of milk is little, if any greater than the local demand, the differential is much less than the freight rate between the two points. In other towns where there is a small consumption but heavy shipments are made, to Philadelphia or large surpluses are made up into manufactured products, the differential is the freight plus part or all of the usual receiving station charge of a half-cent a quart (23¼c per hundred pounds).

Weighing and Check Testing

Members of the Association from the very beginning began to request that the Association check on the weights and tests they were receiving for their milk. The Association complied with these requests as far as its finances would permit, until two years ago when our commission or brokerage was raised from one to two cents per hundred pounds for the express purpose of caring for this service in an adequate way. At the present time we have eight trained and licensed testers engaged in this work. The buyers of milk have agreed to keep all samples for check testing by the Association. The results of this work have been highly satisfactory.

Quality Improvement Work

After two years of educational work throughout our Milk Shed in improving the cleanliness of our milk through such methods as the sediment tests, we found about a year ago that our members were ready to put into operation voluntarily a "clean-up" program. At our annual meeting, in 1923, sanitary regulations were adopted. These covered, not only the production of milk on the farm but through our co-operating dealers, its collection, transportation and distribution in our markets. These regulations were approved by our State and City Boards of Health. The enforcement of them was delegated to the Quality Control Department of the Philadelphia Inter-State Dairy Council which has a force of ten men engaged in the inspection of dairy farms and dealer's plants. The regulations are being strictly adhered to. Through the operation of these regulations such farmers as will not or cannot comply therewith are excluded in shipping to any dealer co-operating with the Association and the Council. This co-operative improvement work has already had a marked effect on the quality of the milk produced and both our Association and the dealers co-operating with it are satisfied with the progress already made.

Advertising

Our Association was one of the first to appreciate the opportunity of increasing the consumption of our products through co-operative advertising. Early in 1921 we organized the Philadelphia Inter-State Dairy Council and affiliated with the National Dairy Council. The full program of Dairy Council activities was outlined and developed including such items as work with school children, women's clubs, parent-teacher associations, motion pictures, newspaper publicity, etc. Since our Dairy Council was organized, the increased consumption has been very satisfactory, averaging about 12% to 14% per year. We feel a large proportion of this is due to the work of the Dairy Council, for during the same period the increased consumption of our whole United States has been much less.

We believe our Association has accomplished a great deal for its members through the work which it has done. It is impossible for me to give you a picture of the development of organization spirit which has accompanied these various forward steps which we have taken. The hundred per cent attendance at our regular directors' meetings and the splendid spirit which is shown in our various local meetings emphasizes the strength of the organization and its proven value to its members. Our growth in membership has been a healthy one and has been sustained from year to year.

Let me say that the various activities in which we have been engaged have worked well in our district and under our conditions. Our market situation is one in which approximately 85 per cent. of the product is sold as fluid milk and the manufacturers in our territory are not a predominating factor and are very largely engaged in the manufacture of special dairy products.

It would have been impossible to accomplish even a small part of what we have without the splendid team work which has characterized our organization, both among its membership, its board of directors, and its group of officers and employees. Every forward step which we have taken has been the result of the combined thought of the group and every step of any consequence has been taken only after it had been discussed, analyzed and fully approved by the membership at large.

NATIONAL COOPERATIVE MILK PRODUCERS' ASSOCIATION

(Continued from page 6)

on "The Goal of the New England Dairy System."

Harry Hartke, Co-operative Pure Milk Association of Cincinnati, Ohio, made an address on the Cincinnati Plan.

Dr. C. W. Larson, Dairy Bureau, United States Department of Agriculture, Washington, D. C., addressed the meeting on the International Aspect of Dairying.

On Friday evening, the editors of the Co-operative Dairy papers, published by the various member units of the Federation held a "Get Together Dinner". After a very full discussion of editorial policies and program, it was decided that some collective program be undertaken and that the editors conference be a part of the annual meetings of the Federation. D. J. Carter, of the Dairyman's League News, was elected president and H. I. Berlowich, secretary of the informal organization.

Delegates of the Inter-State who attended the conference were struck with the fact that a number of other successful marketing associations are following in their dealings with the distributors the conference method which has proven so successful in Philadelphia. A large number are successfully employing a form of the "surplus" selling plan which has been used in Philadelphia since 1920.

Dairy Council activities, sponsored by and supported by dealers and producers are in successful operation in a number of other cities and marketing points.

The whole conference was, on the other hand, very much impressed with two features of the Philadelphia report made by its president, H. D. Allebach. First, the co-operative quality control work which is recognized throughout the country as a piece of unique pioneer work of far reaching significance, and second, the work of the check-testing department of the Inter-State Association.

A REVIEW OF THE YEARS WORK

Annual Report of the President

By H. D. Allebach

(Continued from page 2)

new butterfat differential, feeling that four cents for every tenth of a point was not enough to pay for the additional cost of producing high testing milk. We had been endeavoring to change our present plan, for some time, but without any success. They insisted that we make another effort to do so.

The Holsetin-Freisian Association, insisted that they have a hearing with our organization for the consideration of this matter. A hearing was arranged for both organizations, and, after a lengthy discussion, it was agreed that an effort should be made to base the price on 3.5 milk with a .05c differential down and also from that percentage up to four per cent.; a six-cent differential from four per cent. to 4.5 and .05c from that on up. Committees of both organizations agreed that proposition was fair and left it up to our organization to make such a proposition to the co-operating buyers of milk when the proper time came.

There has been no conference with the buyers of milk although the proposition has been considered by a few of the dealers individually. One buyer made a proposition which we do not believe would be equable at the present time and therefore we have not endeavored to meet the buyers as suggested. Just as soon as an opportunity presents we are going to endeavor to have a new arrangement adopted with the differential mentioned above.

Our finances for the past year have been very satisfactory. We are working under the budget plan and kept within our budget this year. Our commission has increased so we have been able to lay aside a few thousand dollars.

We are building a larger and more efficient organization and in order to do this must have the help and advice of all of our members. They will have to realize more fully that this is their organization and not an organization of a few.

We have no definite changes in policy to bring before the annual meeting this year. No doubt, some of the members will suggest some plans, which of course, they should do if they have them in mind. We are always willing to receive the ideas of our members and criticisms too, providing they can give us something better to work on.

In closing I might state that in reviewing the past year, we feel it has been a very successful one to the dairymen in our territory. The price paid has been above that in our adjoining territories, which has netted our producers many millions of dollars. Of course, our members have had to spend a few of these dollars to improve their premises, but, I believe that most of them would not do without these various improvements and plant betterments if they were asked to do so.

The credit for the great success of the Inter-State Milk Producers' Association does not belong to any one man. Our former president, Mr. Willits, instilled in the minds of the directors that they must have the backing of the entire membership and that policy has been carried on ever since. The success of this organization centers around everyone who has been connected with it.

I want to, personally, thank the Board of Directors, the Executive Committee, and, last, but not least, the office force, with whom I have been in close touch practically every day. I know that every one in the organization has been loyal and has given his or her best co-operation.

One Little Card

that is putting Thousands of Dollars in Dairymen's Pockets

It's a Milk Record Blank that you get *free* with Purina Service. Here's what one of the biggest feeders said:

"I don't know anything about your feed. I've never fed it nor seen it fed. I don't know any one in your organization, but I do know this: If you folks put out milk scales below cost and distribute milk sheets free and invite people to check you up on cost of production, you *must* be lowering the cost of production or you couldn't stay in business.

"All I need to know about your feed is told me in that plan of yours. The milk sheets and milk scales *make* you lower my cost."

This man is a steady Cow Chow feeder today, because Cow Chow DID lower his cost of production, but wasn't that a clear, commonsense line of reasoning he used in considering Cow Chow?

Isn't he right? Isn't the clear thinking of this man worth your own consideration?

Go to the feed dealer with the red and white checkerboard sign who carries Purina Cow Chow. He will supply you with Milk Record Blanks *free*. Figure on Cow Chow for your Winter ration and make more money.

Cow Book—Free

Ask your Purina dealer for free milk record sheets, or write us. We'll send you the 100-page, illustrated edition of the Purina Cow Book. No charge and no obligation.

PURINA MILLS, 854 Gratiot St., St. Louis, Mo.
Seven Busy Mills Located for Service

MILK COW SURVEYS

In six states, Massachusetts, Rhode Island, Connecticut, New Jersey, Michigan, and Minnesota, the percentage of heifers to cows was lower in the present survey than on the census date in 1920. The fact that the census data were gathered as of January 1 and the present survey was made as of June 1 should be considered in making a comparison of percentage of heifers to cows, it being pointed out in this connection that the majority of heifers one to two years of age at the time of the 1920 census was nearly two years of age, while for the present survey the majority had probably just passed one year of age.

All main geographic divisions show increases in number of milk cows, ranging from 1.4 per cent for the North Atlantic States to 14.8 per cent for the Far Western States. Four States, however, show slight decreases, viz. New Hampshire, Massachusetts, New Jersey and Delaware.

The next milk cow survey will be made as of December 1, 1924.

READ YOUR "REVIEW"

When answering ads always mention the Milk Producers' Review in your letters

THE BESTOV CALENDAR

EQUIPMENT TO HANDLE MILK FROM COW TO CONSUMER

AN IDEAL BOILER

For DAIRYMEN and FARMERS

WHY!

BECAUSE IT IS—
an A. S. M. E. Boiler, capable of 50 lbs. steam pressure
Rated at 1½ H. P.
And it is priced within your reach

WRITE FOR DETAILS

We also carry a big stock of CANS, CAPS, COOLERS, PAILS and Everything Else that a Dairyman Needs

SEND FOR SUPPLY BOOK—FREE

Cherry-Bassett-Winner Company

2324 Market St., PHILADELPHIA 33 So. Charles St., BALTIMORE

DAIRY RATIONS

By R. H. Olmstead

The grain mixtures listed below are based on low cost per unit of protein and energy, consideration being given to palatability, bulk, variety and physiological effect. Local prices will also have to be considered.

The following substitutions can be made, and vice versa, whenever necessary or advisable without seriously unbalancing these mixtures: Oats in place of wheat bran; ground barley in place of corn; corn-and-cob meal or hominy in place of corn meal; buckwheat middlings (few hulls) in place of gluten feed.

The use of clover or alfalfa hay will greatly decrease the cost of the grain mixture. Silage or other succulence is desirable in all rations.

In addition to all the roughage a cow will eat, feed the proper grain at the following rate: To a Jersey or Guernsey cow one lb. grain for each three to three and one-half lbs. milk; to a Holstein, Ayrshire, Brown Swiss or Shorthorn cow feed one lb. grain for each four or four and one-half lbs. milk. Three different grain mixtures have been prepared for each of the four roughage combinations.

	Timothy Hay Corn Stover Silage			Mixed Hay Silage			Alfalfa Hay Clover Hay Soybean Hay Silage			Alfalfa Hay Clover Hay Soybean Hay		
	1	2	3	1	2	3	1	2	3	1	2	3
Corn	100	100		200	200		200	250		500	400	
Hominy			100			200			300			400
Oats	100	100		200	200		200	200		400	300	
Bran	100	100	100	100	100	100	100	100	100	100	100	100
Gluten	100		100	100		100	100		100			100
Buckwheat Mids		200			200			100			100	
Cottonseed Meal	200	200	150	200	150	150	100	100	100	100	50	50
Linseed Oilmeal	200	100	150	150	150	100	100	100	100	100	50	50

FOR DRY COWS. After the cow is dried off and before freshening, she should be fed a ration that will put her in good condition for the following lactation period, and supply her with the nutrients needed for milk production. A ration made up of 300 lb. corn, 200 lb. oats, 200 lb. bran, and 10 lb. oil meal, will prove satisfactory and profitable. Two weeks to ten days before calving, the corn should be taken out of the mixture and the amount fed cut to about one-half. This mixture without the corn can also be fed the first week or ten days after calving. A bran mash should be given just before freshening.

This Feed Makes Milk At Less Cost Than Any Other Mixture

This We Guarantee!

International Special Dairy Molasses Feed is actually worth $15 more per ton than corn or oats for dairy use. Corn and oats feed today is selling $10 per ton higher and Special Dairy costs no more than last year. Can you wonder at Special Dairy's popularity? Twenty extra quarts of milk from every sack is guaranteed in any fair test. Compared with wheat feeds or ground grains, this increase has been secured in hundreds of tests.

INTERNATIONAL SPECIAL DAIRY FEED

"20 Extra Quarts from Every Sack"

International Special Dairy Molasses Feed is accepted as O. K. by dairymen everywhere. One dairyman, with 16 cows, writes us that he increased his milk check $87 in thirty days by using Special Dairy instead of another feed costing the same price. $87 a month is over a $1000 per year! We have hundreds of similar testimonials. If you want more milk, sack for sack of feed, then International Special Dairy Feed is your one best bet.

Write to us, giving number of cows owned, also name of local feed dealer, and we will mail you a free copy of our famous book "Feeding the Dairy Cow for Profit." Act!

With 2% Bone-Building Mineral

INTERNATIONAL SUGAR FEED CO., Minneapolis, Minn.
Mills at Minneapolis and Memphis Live Salesmen and Agents Wanted

ORDER A TRIAL TON TO-DAY

FEEDING CABBAGE GIVES MILK OBJECTIONABLE FLAVOR

Succulent feeds in the ration of dairy cows have come to have such importance that many crops not grown primarily for this purpose may enter into the ration. Cabbage and potatoes, though not generally grown for dairy feeds, are often fed to dairy cows as a means of supplying succulence and disposing economically of products that are otherwise unmarketable.

Like other succulent feeds, cabbage and potatoes may have a tendency to impart undesirable flavors and odors to the milk, if fed under certain conditions. Tests have been conducted by the United States Department of Agriculture to determine the extent to which these crops affect the flavor of milk and how they may be fed and milk handled so as to minimize such effect.

It was found that on the average when dairy cows consumed as much as 14.3 pounds of cabbage within one hour before milking time, abnormal and objectionable flavors are produced in the milk. An increase in the amount of cabbage fed intensifies these flavors. An average of 25 pounds of cabbage may be consumed immediately after milking, however, without having objectionable flavors in the milk become noticeable. Some of these flavors may be eliminated by proper aeration of the milk, and others greatly reduced.

The feeding of 14.8 pounds of potatoes an hour before milking may flavor the milk to a slight extent, but hardly enough to be detected by the average consumer. Increasing this amount of potatoes does not increase the abnormal flavors and odors produced in the milk. Dairy cows may be fed as much as 28 pounds of potatoes immediately after milking, with no resultant off flavors in the milk.

ARE YOUR COWS Losing Their Calves

You Can Stop Them Yourself AT SMALL COST

Ask for FREE copy of "The Cattle Specialist," our cattle paper. Answers all questions asked during the past thirty years about abortion in cows. Also let us tell you how to get the "Practical Home Veterinarian", a Live Stock Doctor Book, without cost. Veterinary advice FREE. Write tonight. A postal will do.

Dr. David Roberts Veterinary Co., Inc., 153 Grand Ave., Waukesha, Wis.

Now is the time to go to an agricultural college and get ready to buy a farm; then the young man will be going up with the price level before everybody else tries to climb on.

The central office and the representatives of the association are at the service of every member for the adjustment of all differences with buyers as well as in other matters.

DAIRY EXTENSION MEN PLAN GRAIN RATIONS

Profits in dairying often depend on the amount of care used in feeding. Dairy extension specialists at the Pennsylvania State College make some important recommendations regarding amounts of grain to feed.

For a Jersey or Guernsey cow they recommend feeding one pound of grain for each three to three and one-half pounds of milk given; for a Holstein, Ayrshire, Brown Swiss or Shorthorn cow they find one pound of grain should be fed for each four to four and one-half pounds of milk.

Three different grain mixtures for each of four roughage combinations have been prepared by the dairy extension specialists. In these it is found that the use of clover or alfalfa hay will greatly decrease the cost of the grain mixture. Silage or other succulence is considered highly desirable in all rations.

WARN AGAINST DANGER OF FEEDING MOLDY CORN

Warning against the danger of feeding moldy corn to livestock is given by the Pennsylvania Bureau of Animal Industry. One feeding of moldy corn may be sufficient to poison an entire stable of animals, according to the State officials. They say further that forage poisoning and intestinal disorders will likely occur following the feeding of moldy food. Although horses and mules seem most susceptible, all farm animals are subject to these diseases. Affected animals show symptons of poisoning, will stagger about, and may finally die. In case such symptoms develop, state officials advise getting in touch with the local veterinarian as soon as possible.

Some people plant an evergreen in the yard and decorate it at Christmas time instead of cutting a little tree every year and throwing it away.

MILK PRICE COMPARISONS

January-October, 1924

3.5% Butterfat

At Comparative Country Stations

BUTTER MARKETS FIRM AND ACTIVE

Due mostly to light receipts during the past two weeks and diminished stocks, butter markets held a much firmer position during the week November 10-15. Early in the week buyers experienced difficulty in finding sufficient quantities of fine butter to satisfy their needs and as the week progressed this shortage became acute. Light supplies of top scores improved the demand for lower grades so that at the close of the week general advances had occured.

With the lighter supplies of fresh butter, buyers began to show more interest in storage goods. The out-of-storage movement at four markets about equaled the net reduction for the corresponding week last year and was about a half million pounds greater than for the first week of the current month.

The monthly cold storage report for the United States which was released on Wednesday, November 12, showed holdings of butter on November 1, of 135,251,000 pounds, as compared with 76,472,000 pounds on November 1, 1923, an excess of 58,799,000 pounds. This report was considered by some as bullish, as the excess was estimated by various members of the trade at 60,000,000 to 62,000,000 pounds. Others of the trade looked upon this excess as a confirmation of bad news. There was, however, 135,000,000 pounds of butter in the United States on November 1, which must be moved into domestic consumption or exported before next season. During the past three years the net storage reduction has averaged 71,110,000 pounds for the six months period beginning November 1.

Possibilities of further exports from the United States are less promising, due to weakness and declines in foreign markets. Reports indicate that New Zealand and Australia have a much greater production this year than last and that a considerably larger volume of butter from those countries is now en route to England than at this time last year. Canadian and English markets are reported weak with trading dull. The Danish market was also reported easier, with the Copenhagen market quoted at 536 kroner per 220 pounds, or approximately 43 cents at prevailing exchange. It was rumored, but not verified, that around 2,000 packages of American butter was being returned from England.

Ordinary cottage cheese served with lettuce or other green salad and a small amount of rich homemade preserves makes an appetizing combination.

When meat is selected for real food and vitamin value, the kidney, liver and sweetbread end of the counter will be as popular as the roast sections.

Use clean straw for banking around the cellar wall; it's just as effective as anything else and worlds better for sanitary reasons.

Over 30 milk distributors, throughout the district, are co-operating in the Sanitary Regulation Program.

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THE NAME TO GO BY—WHEN YOU GO TO BUY

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LET US DESIGN YOUR STATIONERY

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Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

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Fully describes causes and disastrous effects of this widespread disease, and points the way to an easily administered treatment that cannot injure animals and is guaranteed to end the trouble and prevent loss of calves. Write today.

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Why Strain Milk?

—with a cloth or fine mesh wire screen strainer when neither of them can possibly remove ALL the dirt from the milk? And you can't get top-notch prices for milk that is not clean.

Dr. Clark's

Purity Milk Strainer

is guaranteed to remove ALL dirt, dust, muck and other sediment from the milk—no matter how fine—or your money refunded. No other strainer made can do that.

PURITY Cotton Discs are made in any size from 5 1-2 in. to 7 in. diam., for all makes of strainers or filters. Send for a trial order.

HERE'S WHY: The Purity Strainer is fitted with a sterilized cotton pad, tightly clamped to bottom, making it necessary for milk to go THROUGH the cotton pad, which removes every particle of dirt.

Used and endorsed by Agricultural Colleges and Dairy Inspectors, Borden's, Van Camp's, Carnation, Mohawk, and Sheffield Farms Dairies.

Made in two sizes—10 quart and 18 quart. If you want clean milk, ask your dealer for the Purity Strainer, or write for circular and prices.

Purity Stamping Company
Dept. F Battle Creek, Mich.

World's Largest Manufacturers of Cotton Discs for strainers and filters.

CRUMB'S Chain Hanging Stanchions

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.

TEAT TRIEVE SAVES TEATS From Going Blind

For SPIDER, INFECTIOUS SCABS, INJURED or FROSTED TEATS.

Apply Teat Trieve when cows' teats have orifices scabbed over or hail-like swellings near the end. Quickly relieves soreness. Restores teat to normal before udder becomes affected. Prevents contagion. Invaluable to all Dairymen. Kept on hand, saves time. Tou le and losses. Price $1.00, p ostage prepaidrOb . D. Satisfaction guaranteed.

HICKOK PRODUCTS CO. 9 AWATONNA, MINN.

MUTILATED PAGE

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So says a prominent Holstein breeder who is always careful about his milking. This is not an exceptional instance, in view of the evidence that is coming from De Laval Milker users, such as the following:

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"I say that the De Laval Milker will absolutely get more milk over hand milking and save so much time that it will pay for itself in a short time."

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And in this manner we could go on quoting from among the thousands of other satisfied users, proving the claims made for the De Laval Milker—that it

1. Increases milk production;
2. Saves time and labor;
3. Produces cleaner milk;
4. Makes dairying more pleasant;
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Sooner or later you will sell

De Laval

Milkers and Cream Separators

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME V — WEST CHESTER, PA., AND PHILADELPHIA, PA., JANUARY, 1925 — NUMBER 9

ELECTRIC FARM SHOW

Harrisburg Pa., January 14-23, 1925

The committee in charge of equiping the J. Q. A. Rutherford farmstead, near Harrisburg, for the Electric Farm exhibition, being arranged for the benefit of State Farm Products Show visitors, January 19-23, anounced today the list of appliances which will be placed on the farm.

A laundry, kitchen, dining room, living room and bathroom will be wired and lighted. The laundry will have a washing machine and ringer, a centrifugal clothes dryer, small and large hand iron, mangle iron, an electric pump, and a trouser press.

In addition to lighting in the kitchen, there will be an electric range, electric dish washer, meat grinder, cake mixer, ventilating fan, desk fan, electric refrigerator, buffer and grinder, apple pealer, vacuum cleaner, electric ice cream freezer, and an electric kitchen table equipped with mixers, heaters, etc.

The dining room will sparkle with electrical devices. An electric toaster, perculator, tea samovar, table stove, waffle iron, desk fan, egg cooker and electric crumb brush and cleaner will be on display.

The living room will have a complete radio receiving set with loud speaker, an ornamental electric fountain, electric heating logs, portable sewing machine with electric sew-light, electric thermostat for controlling temperature in house, electric victrola and an electric reproducing piano.

In the bedroom there will be a heating pad, fan, heater and bed and dresser lamps, and in the bathroom an electric heater, immersion heater, electrically heated hair-drying blower, electric hair drying comb, electric vibrator and an electric razor.

The barn, sheds, poultry house and workshop will be just as completely electrified as the house. About the farm, there will be on display, a wood splitter, power wood saw, threshing machine, portable chore motor, electric floor cleaning machine, clipping machine, grooming machine, ventilating fans, corn sheller, crusher, feed grinder, combination mill, fanning mill, potato grader, hay hoist, deep well jump jack, electric alarm siren, ensilage cutter and blower, bailer, fodder shredder, and a temperature indicator to place in mow of hay to eliminate danger of spontaneous combustion.

The poultry house will have everything electrified except the chickens. The equipment includes an electric incubator and brooder electric egg candler, grain cracker, oyster shell grinder, time switch to regulate artificial lighting and an electrically heated poultry waterer.

The dairy will be the scene of more electrical activity. A milking machine, cream separator, milk clarifier, electric refrigerator with quick milk cooling attachment, churn and butter worker and bottle washer will feature the equipment here.

Last but not least is the wor[illegible] where it will be shown that el[illegible] can aid the farmer the same as [illegible] house and barn. Here the solderin[illegible] grind stone, drill press, electric hand[illegible] electric forge, electric bench grinder, [illegible] able flood lamp for emergency or n[illegible]

FARM PRODUCTS SHOW

[illegible]-23, 1925

[illegible] Harrisburg, [illegible]29, promises to be the [illegible] exposition of farm products ever seen in Pennsylvania.

DON'T FAIL TO VISIT THE

ELECTRIC FARM

STATE FARM PRODUCTS SHOW

Harrisburg, Pa.

January 19-23, 1925

AT THE

J. Q. A. RUTHERFORD HOMESTEAD

On the William Penn Highway

3 MILES EAST OF HARRISBURG

NINETY DIFFERENT ELECTRICAL APPLIANCES WILL BE EXHIBITED

IN ACTUAL OPERATION

Every Convenience for the Farm Home, Dairy, Stable, Barn Equipment, Etc.

DON'T MISS THIS EXHIBIT WHILE ATTENDING THE

PENNA. STATE FARM PRODUCTS SHOW

HARRISBURG, PA.

Electric Exhibit will be open from January 14th to 23rd, 1925

work, centrifugal fire pump with hose, chemical fire extinguisher and batteryless electric hand lamp, will be seen.

Representatives of the Giant Power Survey, State Department of Agriculture, Pennsylvania State Grange, Pennsylvania State College, State Council of Agricultural Associations and the Pennsylvania Electric Association including electrical

(Continued on page 9)

Starting nine years ago with only a few thousand square feet of space, this mid-winter show has steadily grown until four large buildings are now used for the exhibits and 10 other halls and auditoriums as meeting places for the 25 or more farm organizations which cooperate in making the show possible. Many of these organizations hold their annual meetings during the week so that

[illegible] has been made one of great [illegible]ucational value.

At a recent meeting of the executive committee, assignments of exhibits were made as follows: The poultry and egg show will occupy the Chestnut Street Market House; the exhibits of apple, potato, tobacco and apiary products will be on the second floor of the Emerson-Brantingham Building; the swine show will be held in the first floor of the Emerson-Brantingham building. The wool, small grain and the State educational exhibits will be arranged at the Rendezvous ballroom.

Several new classes have been added in the potato exhibit. For the first time this year there will be a class opened only to growers of certified seed potatoes, also a class where county commercial exhibits will be entered. Separate classes have been made for the boys and girls potato club exhibits. This is a change from previous shows when the boys and girls were forced to compete with adult growers of potatoes.

The programs for the various organization meetings have been completed and reveal a real treat for those interested in the activities of any of the organizations. The Pennsylvania Breeders' and Dairymen's Association will start its meeting Tuesday morning, January 20th, in the Senate Caucus Room in the State Capitol. The first day is designated as swine and sheep day. Among the speakers on swine management are E. Z. Russell, Federal Swine Specialist, Washington, D. C., and L. C. Madison, Swine Extension Specialist of Pennsylvania State College. They will speak about swine growing as a part of permanent system of farming and recent developments in swine breeding. On Tuesday afternoon, the program will deal entirely with problems of sheep management. The results of six years co-operative wool marketing in Lawrence county will be discussed by N. C. Dale, New Castle and W. B. Connell, well-known sheep specialist at Pennsylvania State College, will discuss the development of a sheep program for Pennsylvania. Wednesday, January 21, has been designated as dairy day by the Pennsylvania Breeders' and Dairymen's Association. The forenoon will be devoted entirely to discussions of problems of bovine tuberculosis eradication. Among the speakers will be Frank P. Willits, Secretary of Agriculture, and Dr. T. E. Munce, Director, State Bureau of Animal Industry, Pennsylvania Department of Agriculture; R. R. Welch of Grove City; and Dr. C. M. Christy of Brookville. The afternoon will be taken up with discussions of the producing and marketing of dairy products.

In addition to the general meeting of the Breeders' and Dairymen, the Pennsylvania Ayrshire Breeders' Association will hold a meeting Tuesday afternoon, January 20. The Jersey Breeders will

(Continued on page 9)

MARKETING MILK IN CONNECTICUT

By C. E. HOUGH, Manager Connecticut Milk Producers Association

Address Presented at the Annual Meeting of the Inter-State Milk Producers Association

You have asked me to talk on co-operative marketing in Connecticut. I presume that you mean to have me talk on co-operative milk marketing and I am going to confine myself to that almost entirely. I would say that the Connecticut Association is the same age as yours—eight years old. We are only about one-sixth your size, however, having about 3,000 members. I realize your problems are identical with ours. Your methods of sales are somewhat different but at the same time along the same lines. The milk producers were the first to co-operate in marketing products in our state. The next were the tobacco growers, who watched us improve our business and at the present time, 85% or 90% of the tobacco growers in the Connecticut valley, which grows the finest tobacco in the country, are now organized in co-operative marketing, instead of dumping their tobacco. Following our example, the poultry producers have now formed an egg producers' association and are marketing their products co-operatively. The vegetable growers' association is also planning to form a co-operative marketing association. Co-operative Marketing in Connecticut is attempting to keep up with the trend of agriculture throughout the United States, and it is well that it is.

The Connecticut Association is a bargaining association very similar to your own. We have no investments beyond the investments in our office furniture. We bargain with the dealers much the same as you do in the sale of milk. We have not been compelled to go into the retail field. We know that there would be a long fight ahead if we did. We are also cognizant of the fact that the distributors of milk in our territory are probably more efficient in the operation of their business than we could become in quite a period of years. We believe that a bargaining association can function. It takes perhaps a different type of tact than is necessary in a marketing organization, but if both parties to the bargaining mean to be fair, I see no reason why we cannot continue on the bargaining plan for years to come.

Our problem, as yours, is principally a problem of surplus milk, and adjusting the price of surplus milk so that every member can have a market for his milk all of the time, and that the fluid milk, which is the most valuable milk we have, can bring its maximum value. We feel that, having more or less solved our surplus problem, we have very largely solved our price problem with it. We went through a four or five years in attempting to set a single price on milk, but we found that if we set that price to where production of milk was profitable, there would immediately be a surplus, and there would be a seasonal surplus, in any event. If we did not have a seasonal surplus, we were sure to have a seasonal shortage, and as soon as a seasonal shortage arrived, the milk dealers with whom we dealt would go into distant fields for their milk and bring to us permanent competition that was worse than we had before.

Nearly four years ago, we started using a milk contract—a contract which we asked our members to sign stating the amount of milk which he could produce for the year. In that contract there was a 10% leeway allowed the producer. On any amount of milk he produced in excess of that leeway or below that leeway, he would be penalized by the dealer at the rate of two cents per quart and the dealer would put that amount in his pocket, which gave him an opportunity to cover part of his losses on surplus, and to pay premiums on milk he might be obliged to buy from outside.

We found the dealer would buy about as much milk as he thought he could sell and if there was any milk left over some men were left without a market. That system fell down.

Previous to that however, we used in one part of our territory what was called "The Osgood" system, taking the last three months of the year as the amount which should be the basic quantity for the coming year, but we found the dealer in whose territory we used this said, "No, your price is too high for us to buy milk on that basis. We will buy it at the Boston price but we can't pay the Connecticut price on milk when we are gambling on the supply," and it worked with them on the Boston price basis for one season.

The next season, however, the production in that district increased very materially until the end of the three month period the dealer said, "No, we can have nothing to do with that unless we pay a discount price or unless we pay 70% or 80% of such ratings." We abandoned the idea of the Osgood plan and in the spring of 1922 we established what we called the pooling system. We still use the simple contracts in conjunction with the pooling system among small dealers only, but 80% of the milk we sell to dealers is sold under the pooling system.

The pooling contract carries a great many paragraphs. We repuire under it that each producer shall sign the amount of milk which he wishes to produce for a year beginning April 1st. For any milk produced above or below that rating during the month, taking the month as the period on which to average that rating, there is a penalty of two cents a quart. This is returned through the dealer each month, so that the penalties do not go to the dealer. They belong to the group of producers supplying a single dealer. If it is 5% of the amount which the dealers pay out for the month's milk, each man shall have 5% added to his milk check.

The tendency is to equalize production throughout the year. As it works out, returning these penalties to the producers, it constitutes a bonus to the producer whose production is most even and a loss to the man whose production varies more widely. This evens production to a great extent, but it does not dispose of the surplus milk on the market.

To meet that problem, we use the pooling plan. We have what we call Class 1, 2, 3 and 4 milk. Class 1 is fluid milk, Class 2 is milk used by the dealer in making cream. Class 3 used in the manufacture of ice cream or cheese and Class 4 for making butter.

We meet as regularly as we go to church, only not quite so often. We consider that the monthly meeting with the dealers gives a contact with the industry which we must have in order to know the attitude of the dealer, to keep in close touch with the market, that our price may be right and fair and in keeping with the law of supply and demand.

We have learned that there is no use in trying to defeat or repeal the law of supply and demand, but we do find that we can work with that law, obtain its blessings and escape most of its punishments.

In the pooling plan, the dealer figures out the amount of milk he uses as fluid milk, cream, etc., and blends together the prices of the different classes and returns to his group of producers that pool price. In that way, we do not ask the milk dealer to gamble on any milk at all. We are convinced that as soon as we ask the buyer of a commodity to gamble on what he is to receive or to gamble on how he is to use it, that he will hedge. He will protect himself by refusing to pay a price where the gamble is a great risk ot him. The supply of a commodity that just meets the need of the market will bring more money than a greater supply, just as a man will pay more for a suit of clothes which fits him than he will for a suit that is too big.

If the producer wants the full benefit of the returns of the fluid milk market, he must assume the full responsibility for the discount in price on all of the surplus which must be sold at lower than the fluid price.

We believe in advertising. As I said, our association is only about one-sixth the size of yours, yet last year and the year before we expended about $30,000 in Dairy Council work. This has probably done more for us than any single activity we have engaged in. We have taught the people much about the food value of milk. We have increased our sales of milk and in increasing the sales we have increased its value in public estimation. We have been able to maintain much higher prices than otherwise would have been possible.

I have heard your discussion of quality control today with much interest. We have a quality control department in Connecticut that is very vital to our business. Ours is different from yours. We have a milk regulation board composed of six men who, under the law, are given authority to make rules and regulations for the production and handling of milk. The head or administration officer who works under the board, was a former president of our association. The law requires that he be a milk producer himself. They have seven or eight inspectors paid by the state who are on the job all the time watching milk quality. This has helped us a great deal in bringing the quality of all milk to a higher standard and it has given us a quality of milk the public likes and is willing to pay for. Nothing will help our business greater than a fine flavored quart of milk and milk will not be good flavor unless it is clean and kept cold. We have repuirements that insist that milk shall not be delivered to a dealer at more than 60°. It must leave the farm at less than 55°. Even while our climate is colder than yours, we have this last year begun icing milk trucks where the trips are more than twenty or thirty miles long. We have found that the ice expense is very light and that the benefits from it to the producer have more than equalled the cost. The cost of putting a few hundred pounds of ice on a large load of milk is a matter of two or three cents per hundred pounds. It has saved a great deal of milk. It has helped in the butterfat problem. We have less milk churned into butter in the cans this year than ever before because of icing.

We have now embarked to some extent on a cost program. We have felt that we have practically reached the top in milk prices. We have gotten milk prices as high as they should go. We have gotten them to where the competition from powdered and condensed milk is a competition to be seriously considered. Our milk prices are higher than yours. Our fluid milk price is 9½ cents a quart and has been since the first of September. Our retail price is 16 cents a quart. Our spread, as you will notice, is wider than yours, but our delivery conditions are not as good as yours here. Dealers go all over the cities and drivers go to the rear door and to the top floor of apartment houses. The spread is 6½ cents on pasteurized milk.

Production costs are things we are now taking up as our newest field of endeavor. We are calling on our county agents and agricultural colleges to work with us. We are inviting representatives of these organizations to all our meetings and asking them to put across the best knowledge there is in the line of feeding and the growing of proper forage crops to feed our stock.

The four principal parts of our business that we feel we must not overlook are: (1) the quality, (2) advertising, (3) cost of production, (4) efficient marketing. If we will all keep these in mind and make them as near 100% perfect as possible, we will come into line with organized industry, so that we will be entitled to sit in the councils of the nation with men engaged in other lines of profitable work .

Discussion

Question—What are the state regulations concerning the different qualities or grades?

Answer—Our Association adjusts or establishes differentials for the different grades of milk. Our Grade B is the milk referred to which we sell at 9½ cents per quart. Grade A for pasteurization brings 60 cents per hundred pounds premium above Grade B. Grade A raw, milk made under more strict regulations than the milk for pasteurization, brings 2 cents per quart above the price for Grade B.

Question—Do you have much trouble in getting the dealers to co-operate with your Association?

Answer—No, we don't believe in the strike method. It is only when we find a fellow who just wants to be mean that we give him a chance to try it.

Question—When a dealer offers more money to the members, what do you do?

Answer—Our price is so high that any dealer offering more money is a fool. We don't have many such generous men in our district. We maintain a

(Continued on page 13)

GRADING MILK — WHAT DOES IT MEAN?

ERNEST KELLY, U. S. Department of Agriculture

(Reprinted, in Part, From "Hoard's Dairyman")

* * * * * Milk grading allows the consumer to select the particular kind of milk he wishes to purchase; paying a higher price for especially fine grades and a lower price for grades requiring less care and expense. This does not mean, however, that dirty, unsafe milk may be sold at any price. Even the lowest grade sold should include only milk that is safe for human consumption, and that which contains an adequate supply of food materials.

Advantages of Grading

From the milk producer's standpoint, grading should be extremely beneficial. There are many dairymen of high ideals who spend additional time and money to produce milk of superior quality, while there are others who have interested themselves only to the extent of complying with compulsory requirements. The adoption of rational grading will reward the careful dairyman, while it will raise the standards of the less careful so that they may also benefit. Undoubtedly, some few milk producers will prefer to withdraw from the market rather than observe even the elementary features of grading. These dairymen who quit, rather than take reasonable precautions, will benefit the careful dairymen and the industry as a whole. Their departure will eliminate cheap, careless competition and will serve to raise the quality of dairy products to a higher plane.

What is Grading

* * * * * Grading has a very definite meaning, but an exceedingly vauge interpretation. Grading milk means to separate the available supply into certain classes, the highest of which is usually a rather small proportion of the product, and that is which has received the greatest sanitary care. Sometimes milk of higher food value is included in this grade, but this is not always the case. The grades gradually decrease in quality until the lowest legal limits are reached.

In the previous paragraph I said that grading has a vague interpretation. By this I mean that it is often based on different factors, and even the same factors may differ in emphasis in different localities. For instance, the following factors, among others, are used in grading: Fat, solids-not-fat, pasteurization, total bacteria, bacteria of the colon type, streptococci, farm conditions, sediments, health of cattle, cleanliness of milk plant, acidity, flavor, and odor, etc. Various combinations of some of these factors, with or without mathematical ratings, are used to determine grades. Also different weights are assigned to similar factors in various places. It is, then, impossible to make a definite statement of what constitutes Grade A or Grade B milk in general. I shall, however, give some illustrations later on in this article.

Who Should Enforce Grading?

There has been some discussion as to what agency should operate the grading mechanism. In the case of market milk and market cream it would seem that the Health Department of the city where the product is to be marketed is the party to handle the subject. Health officials are entrusted with the health of the community, and it seems a logical part of their inspection work. Other agencies, however, are vitally interested and there are many advastages in their exercising preliminary grading for their own protection. Farmers' organizations must select certain milks and reject others if they are to be successful. For instance, sour or garlicky milk cannot be mixed with good milk without seriously injuring the quality of the entire product and jeopardizing its marketing at a good price. A number of co-operative associations have already taken a stand for a better grade of products delivered to them. Milk dealers, too, cannot afford to receive low-grade products, and many of them are not only rejecting unsatisfactory milk, but are paying premiums for low bactria counts, high farm scores, or tuberculine-tested cattle. By doing this they safeguard their own business, and often are able to sell special grades at advanced prices.

It is not usually wise for individuals to grade their milk for sales purposes. While this has been done honestly and successfully in a few cases, the grading should be in the hands of disinterested parties. I remember one instance some years ago where one man was delivering "Special Baby Milk" which had a bacteria count of several million per cubic centimeter and was otherwise not suited to the label used.

* * * * *

Certified Milk

Certified milk is milk produced under the supervision of a medical milk commission appointed by a regularly constituted medical association. The commission is entrusted with making regulations for the production, handling, and delivery of certified milk. It employs veterinarians, physicians, bacteriologists, and chemists to report frequently on the health of cattle and employees, sanitary conditions on the farms, bacterial counts, and chemical analyses of the milk. These Commissions are usually affiliated with the Association of American Medical Milk Commissions. This federation has drawn up one hundred or more regulations dealing with certified milk.

The main requirements are as follows:

Tuberculine testing of all cattle.
Sterilization of utensils by steam for at least 20 minutes.
Small-top milk pail.
Bacterial count below 10,000 per c. c.
Temperature of milk between 35 and 45 degrees F. at all times.
Butterfat 4 per cent with a range from 3.5 to 4.5 per cent.
Raw milk unless specially directed.
Specific gravity, 1,029 to 1,034.
Medical examination of all employees.
Freedom from all pathogenic bacteria.

Of course there are many more regulations, but these are the basic ones.

What is Grade Milk?

I said earlier that Grade A milk has a definite meaning, but a vague interpretation. For this reason it is impossible to say just what Grade A milk is throughout the country as a whole. In general, it represents the highest quality of milk marketed in any community. As to the regulations governing the production and handling of Grade A milk, they vary over a wide range. A few examples of Grade A standards will show the trend of requirements for this product. Grade A milk sometimes includes certified milk; it may be either raw or pasteurized; or it may be called by a specific term such as "special," nursery," or a similar distinctive name.

A very short summary of the principal requirements governing Grade A milk in New York city follows. The items given by no means cover the entire regulations, but are choosen to show the fundamental items:

Grade A milk, skimmilk, and cream (raw)

Tuberculine test at least once a year, and removal of reactors.
Physical examination of cattle.
Cow's udders, teats, and flanks washed before milking.
Proper construction, lighting, and ventilation of stables.
Sterilization of utensils.
Pure water supply.
Properly constructed, lighted, ventilated, and screened milk house.
Milking with clean, dry hands.
Immediate cooling of milk to 50 degrees F., maintained at all times.
Not more than 30,000 bacteria per cubic centimeter when delivered to the consumer or at any time previous.
Cream not more than 150,000 bacteria per c. c.
Delivered to consumer within 36 hours after production.
All delivered in bottles.
Healthy employees.
Bottle caps to be labelled "Grade A (Raw)."

Grade A milk, skimmilk and cream (Pasteurized)

Physical examination of cows at least once a year.
Stables, utensils, water supply, milk house, and milking practically the same as Grade A (Raw).
Immediate cooling of milk to 50 degrees F. or less; except morning's milk is delivered before 8 a. m. to cooling station or pasteurizing plant.
Raw milk to be pasteurized in New Yory City must contain less than 200,000 bacteria per c. c. before pasteurization.
Raw milk to be pasteurized outside of New York City and shipped into the city, must contain less than 100,000 bacteria c. c. before pasteurization.
Milk to contain not more than 30,000 bacteria per c. c. on delivery to consumer.
Cream to contain not more than 150,000 bacteria per c. c. when delivered to consumer.
To be delivered to consumer within 36 hours after pasteurization.
Delivery and health of employees same as Grade A (Raw).
Pasteurization means heating to at least 142 degrees F. for thirty minutes or more.
No lower grades to be received in a Grade A pasteurizing plant.
Bottle caps to be plainly printed "Grade A (Pasteurized)."

Grade B milk, cream and skimmilk

This comprises the greater bulk of milk shipped to that city and consumed. It can only be sold in pasteurized form and the requirements as to production and handling are similar to those for Grade A (pasteurized) except as briefly noted below:

Utensils "scalded with boiling water", but facilities for sterilization are not required.
Immediately cooling of milk to 60 degrees F., except morning's milk delivered to creamery or pasteurizing plant before 9 a. m.
Raw milk to be pasteurized in New York City must contain less than 1,500,000 bacteria per c. c. before pasteurization.
Raw milk to be pasteurized outside New York City and shipped into the city must contain less than 300,000 bacteria per c. c. before pasteurization.
Milk to contain less than 100,000 bacteria per c. c. on delivery to consumer.
Cream to contain less than 500,000 bacteria per c. c. when delivered to consumer
Milk to be delivered to consumer within 48 hours after pasteurization and cream within 96 hours.
Milk or cream may be delivered either in bottles or cans.
Bottle caps to be plainly printed "Grade B (Pasteurized)," and all cans so labelled.

Grade C milk, cream and skimmilk

This can only be sold for cooking and manufacturing purposes. It must be pasteurized and the production requirements are simpler than for the other grades. Provision, however, is made for an annual physical examination of cows, healthy employees who handle the milk, and the other requirements of the usual state laws covering the production of milk in a cleanly manner. There is no requirements as to bacteria count, except that there shall not be an "excessive" number. Milk must be delivered to consumers within 48 hours after pasteurization, and cream within 72 hours. Bottle caps and can labels must be plainly printed "Grade C milk, skimmed milk, or cream (for manufacturing purposes only)."

Commission on Milk Standards

The New York Milk Committee, some years ago, appointed a commission on Milk Standards to study the situation and recommend standards for various grades. Although the commission's standards have been changed from time to time, it may be interesting to note the recommendations for Grade A milk, as published in 1921. They are, in brief, as follows:

Grade A, Raw.

Tuberculin testing of cattle.
Medical inspection of employees.
Milk produced under sanitary conditions.
Not over 10,000 bacteria per c. c. when delivered to consumer.
Dairies to score at least 80 in the United States Dairy Division, Bureau of Animal Industry, score card.

Grade A, Pasteurized.

Physical examination of cattle.
Milk produced under sanitary conditions.
Not over 200,000 bacteria per c. c. before pasteurization.
Not over 10,000 bacteria per c. c. at time of delivery to consumer.
Dairies to score at least 65.

Grading by Scoring Milk

Certain cities, counties and states, especially in the west, are following a system of grading milk by scoring the product on the United States Dairy Division, Bureau of Animal Industry, score card for milk. This score card allows the following credits:

Bacteria	35
Flavor and odor	15
Visible dirt	10
Fat	15
Solids-not-fat	15
Acidity or temperature	5
Bottle and cap	5
Total	100

* * * * *

Important Factors in Grading

To sum up in a few words grading should comply with the following standards:

1. It should truly represent differences in quality.
2. The grades should be few and understandable to both producer and consumer.
3. The grades should be adopted to local conditions.
4. The system should be thoroughly and intelligently enforced by some agency having the confidence of producer and consumer.
5. It should offer an incentive in added trade or better prices, to the producer.
6. It should educate the consumer to appreciate high quality in milk.

Despite some controversy regarding the present status of grading in some localities, there is no doubt that such a system is forging to the front. It has worked with butter and cheese, and will work with milk, although the grading of milk requires more complicated clerical and laboratory work.

Just as sure as the sun shines, the Grade A dairyman is going to be rewarded by increased markets for his products, and increased respect and recognition from the milk consumers.

INTERSTATE
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August A. Miller, Editor

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Editorial

DRINK MILK EVERYBODY

The Inter-State Milk Producers' Association extends, through the Milk Producers' Review, to all its members its best wishes for a Happy and Prosperous New Year.

It is to be hoped that the spirit of co-operation and friendliness will not only continue but that it will become stronger and stronger so that the greatest good may be obtained for all of its membership throughout the Philadelphia Milk Shed.

Beginning with January, the basic and surplus provisions for the sale of fluid milk, under the Philadelphia Selling Plan, again become effective.

The basic quantities of milk shipped during October, November and December, or other mutually agreed upon periods during those months, fixes the farmers basic quantity of milk on which co-operative dealers will pay the Inter-State Milk Producers' Association basic price in 1925.

For quantities in excess of the basic quantity, and equal to it in amount, will be known as First Surplus Milk, throughout the year—with possible exceptions during July, August and September.

The First Surplus price is based on the average monthly price of 92 score butter, solid packed, New York City, plus a premium of 20 per cent. and applies during the first eight months of the year.

The second surplus price, represents that paid for milk in excess of an amount of first surplus, equal in amount of the basic quantity.

The second surplus price is based on the price of 92 score butter, solid packed, New York City, but does not carry any premium.

New shippers, beginning the delivery of milk to co-operating dealers, after the first day of January, 1925, may establish a basic quantity amount on the basis of 50 per cent. basic and 50 per cent. surplus during such period as may be mutually agreed upon between buyers and sellers, usually the first thirty days in which shipments are made.

REDUCED RAILWAY RATES

Pennsylvania State Farm Products Show

The various railroads have made special reduced fare rates for members of Pennsylvania, New Jersey, Delaware, Maryland and New York Agricultural Associations, and their families. to attend the Pennsylvania State Farm Products Show, Harrisburg, Pa., January 19th to 23rd.

Make application to, or communicate direct with R. W. Balderston, secretary Inter-State Milk Producers' Association, 1211 Arch Street, Philadelphia, for a blank form. Have ticket agent fill out this form when purchasing ticket.

Validation of the Blank will enable you to purchase return fares at one half the usual rate.

DIRECTORS' MEETING

The regular meeting of the Board of Directors of the Inter-State Milk Producers' Association, was held at its headquarters in the Boyertown Building, Philadelphia, Pa., on Monday, December 29th, 1924.

Reports were received from various committees and routine business was transacted.

H. D. Allebach, President, made a detailed report as to market conditions and also reported on the association's accomplishments since the last directors' meeting.

Robert F. Brinton, Treasurer, presented the 1925 budget of expenditures, which was approved.

F. M. Twining made a report on the year's work of the Testing Department and outlined the policies for next year.

Detailed reports of conditions from the various directors as to conditions of supply, etc., in their territories were received, after which the meeting adjourned.

KRAFT CHEESE COMPANY

We are able to announce that the Kraft Cheese Company, the organization which recently absorbed the P. E. Sharpless and Company receiving stations and plants at Cochranville, Concordville, and Toughkenamon, Pennsylvania, will pay producers, shipping milk to those plants, the regular association prices for milk.

These plants, owing to the fact that their product was largely made into butter and soft cheese, have, except at the Concordville plant, been paying prices, somewhat under the association basis.

REPAIR FARM MACHINERY

A few minutes spent at this time of the year looking over the machinery for parts that are badly worn or broken will be profitable.

The needed repairs can be ordered and put on during the winter. Then, when spring work starts there will be no delay due to broken machinery.

CHICKEN SHOW BANNED AT STATE FARM PRODUCTS SHOW

Owing to the fact of the prevelence of the European Fowl Plague, the Poultry Show at the Pennsylvania State Farm Products Show has been cancelled.

Under regulations of the Pennsylvania Department of Agriculture a quarintine prohibits the movement of live poultry from Connecticut, Delaware, New Jersey, New York and Rhode Island, into the state. Poultry from other states are permitted to enter the state for "immediate slaughter only," except by special permission from the Department.

These regulations do not apply to the movement of poultry when they are entirely within the state.

Style of Poster being used on the farms of members of the Dairymen's Co-operative Sales Co., Pittsburgh, Pa.

SAVE SOME CORN FOR SEED—SHORTAGE LIKELY THIS YEAR

A probable shortage of good seed corn in some sections is predicted by the United States Department of Agriculture in consequence of the unusually late spring and continuous cool weather, factors which have caused corn to be very late. Much of the year's crop may not mature enough to make the best seed before a killing frost. Then too, many farmers have had to replant their spring planting, drawing heavily on their supply of old seed corn. The higher prices being paid for old corn at the present time are tending also to deplete this supply of corn from which seed could be selected in an emergency.

It is suggested that before selling or feeding old corn apparently good seed ears be picked out.

The best seed corn is that which has matured on the stalk. Corn gathered in the milk stage, if carefully dried and handled, will germinate under favorable conditions, although it will not have the vigor that mature corn would have. Satisfactory seed corn can be selected, however, any time after corn is in the hard-dough stage. The same points should be observed in selecting seed from immature corn as would be observed under ordinary conditions. Select seed only from normal, vigorous plants; avoid smutted plants.

NATIONAL DAIRY COUNCIL HOLDS FIFTH ANNUAL MEETING

The National Dairy Council, held its Fifth Annual Meeting on December 4th and 5th, 1924, in Chicago, Ill.

Representatives were present from the various Dairy Councils throughout the country as well as representative milk distributors, butter makers, ice cream and cheese makers, dairy manufacturers and equipment manufacturers as well as representative health and nutrition authorities and others identified with the work of the Dairy Council.

Mr. M. D. Munn, president, outlined the past achievements of the National Council during the past year. He urged for a budget of $145,000 for the next year, so as to enable a broadening of the activities of the National Council for 1925.

The secretary's report showed that the Dairy Council was organized in eleven different districts of the country and that the 1924 budgets of all the dairy councils combined was approximately, $595,000. Milk consumption, it was shown, had increased during the past three years from 43 to 53 gallons per person, butter consumption from 14.7 to 17 pounds per person, ice cream from 2.46 to 2.68 gallons and cheese from 3.51 to 3.91 pounds per person.

Reports were received from the various representatives of the local councils.

R. W. Balderston, secretary of the Philadelphia Inter-State Dairy Council briefly summarized the Philadelphia conditions. This territory now consumes 23 pounds of butter per person as compared with 17, the average for the United States and the consumption of oleomargarine in Philadelphia is approximately ½ pound as compared to 2 pounds or more the average for the United States. Both milk and ice cream consumption continue at a high average rate.

The officers elected to serve for the next year are unchanged:

President, M. D. Munn; first vice president, J. A. Walker; second vice president, E. M. Baily; treasurer, T. A. Borman; assistant treasurer, C. T. Hayes; secretary, M. O. Maughan.

COMMUNITY MEETING OF FARMERS AND THEIR FAMILIES AT UNIONVILLE JOINT CONSOLIDATED SCHOOL

Plans have been made for a huge farmers' meeting in Unionville, Penna., on Tuesday evening, January 13th, at 8 o'clock in the new Consolidated School.

A group of pupils of the school will give a performance of the "Health Circus" under the direction of the Dramatic Department of the Philadelphia Inter-State Dairy Council.

In addition to the "Health Circus", Prof. Thos. H. Bock, former Superintendent of Schools in Chester County, will speak on "The Joint Consolidated School—What it can do for the Community and What the Community Should do for it." Prof. Floyd Fretz will speak for a few minutes on what is being accomplished at the Unionville school. Mr. C. I. Cohee, Director of the Quality Control Department of the Philadelphia Inter-State Dairy Council will speak on "Milk Improvement and What may be Accomplished through Better Standards of Production." A two reel moving picture comedy entitled "Shadows" will also be shown.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions of the Philadelphia Selling Plan again become effective with January, 1925. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1924.

Beginning with January, milk will be paid for by co-operating dealers, on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount, will be paid for on the average New York, 92 score butter, solid pack, price for the month, plus 20 per cent. Milk in excess of the amount equal to the basic quantity will be paid for on a flat average New York, 92 score, solid pack, butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from any producer at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

DECEMBER BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

JANUARY BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test Per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.45	3.12	6.7
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving stations 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37
November	6.3	2.37
December	6.3	2.37

DECEMBER BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Miles	Basic Quantity Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

JANUARY BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arangements.

Prices are les freight and receiving station charges.

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1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.28
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.15
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

DECEMBER BUTTER PRICE
92 Score Solid Packed

	Phila.	New York	Chicago
1	47	47	48 1/2
2	47 1/2	47	48 1/2
3	47	47	47
4	46	46	45 1/2
5	45 1/2	45	43 1/2
6	45 1/2	45	43
8	46	45	43 1/2
9	45	44	43
10	45	44	41
11	44 1/2	43 1/2	41
12	45	44 1/2	41
13	45 1/2	44 1/2	41
15	46	45	41 1/2
16	45 1/2	44 1/2	41 1/2
17	45 1/2	45	42
18	45 1/2	45	41
19	44 1/2	44	—
20	44 1/2	44	40 1/2
22	44 1/2	44	40 1/2
23	44 1/2	43 1/2	41
24	44 1/2	43 1/2	41
26	45	44	41
27	45 1/2	44 1/2	41 1/2
29	46	45	42 1/2
30	45 1/2	45	42
31	45 1/2	45	41 3/4

PENNSYLVANIA STATE GRANGE

Fifty-second Annual Meeting in Reading, Pennsylvania

The Pennsylvania State Grange, Patrons of Husbandry, held its annual meeting in Reading, Pennsylvania, December 9, 10, 11, at the Rajah Temple. Upwards of 1800 delegates and members attended the meetings.

The various sessions were presided over by John A. McSparran, Master, who at the opening meeting made an interesting address. "The farmer," he said, "can take care of himself if he is extended the same privileges as other businesses.

"General conditions are slightly impossible but there will, however, be no real prosperity until business is granted economic justice. There was a time when there was virgin land, where, when the farmer found conditions oppressive in the older sections, could move west. But now no new lands are to be had and agriculture awaits an equality before the law.

"The farmer will take care of himself if the privileges that the government has given to other businesses are taken away and the farmer can buy in the same kind of a market as that in which he has to sell."

Considerable time was given by the delegates, during the various days sessions to the conduct of routine business of the organization. Many problems for the betterment of grange affairs were discussed and plans for the future considered.

On Wednesday evening the annual State Grange banquet was held in the Rajah Temple Banquet Hall.

At Thursday's session, Governor Gifford Pinchot, of the Commonwealth of Pennsylvania, made a formal address as chairman of the State Grange Committee on forestry and conservation, in which he outlined the progress of conservation methods.

"In 1923," he said, "the income from State forests amounted to more than $113,000, almost twice that of any previous year. This income will increase rapidly as the trees approach maturity.

"Forest fires," he said, "during the spring covered but a small area of 46 acres, the lowest average for any spring period. The fall record, considering the prolonged drought and consequent serious forest fire hazard, was also exceedingly small.

"The success of the fall season is attributable to a very large degree to the co-operation of the general public and to the extremely generous response to the Governor's proclamation placing a ban on hunting during the period of the greatest fire danger.

Speaking of the work of the Giant Power Survey Board, Governor Pinchot said, "I am confident that these changes will work no injustice upon legitimate interests, but it is not to be expected that they can be enacted without the support of an intelligent and earnest public opinion. I ask for the support of the farmers in this matter because it is one that profoundly concerns the general welfare and the welfare of farmers most of all."

Hon. F. P. Willits, Secretary of Agriculture for the Commonwealth of Pennsylvania and treasurer of the Pennsylvania State Grange, made a detailed address on the subject of the eradication of tuberculosis in cattle. He outlined the past years program and also the ambitions of the Department of Agriculture toward a large increase in this work during the next two years, if sufficient money is appropriated by the coming legislature.

Important resolutions were adopted at the Thursday session. Among others were the following:

National

"Opposition to the child labor amendment to the Federal Constitution.

"Opposition to the proposed Federal Department of Education.

"Continuation of our relations with the National Board of Farm Organizations.

"Enactment of proper laws governing agricultural and co-operative farm organizations.

"Retaining of excess profits and income taxes.

"Opposition to bills empowering banks to establish branches.

State

"Opposition to centralizing assessment and collection of taxes.

"Enactment of law imposing capital stock tax on manufacturing corporations.

"Adequate appropriations for township rewards for road building.

"Continuance of present gasoline tax. This we believe to be one of the fairest measures on our books.

"Continuance of present emergency profits tax.

"Not only opposition to the proposed bill lowering age limit of those taking out fish license, but active effects to repeal the fish license law.

"Larger appropriations for local schools and highways.

"The payment by the State of the minimum salary of teachers for the minimum term. This cost of local government being fixed by the State should be paid by the State.

"Opposition to returning part of automobile license fees to cities or municipalities.

"Enactment of commercial fertilizer laws which will stop Pennsylvania being used as a dumping ground for cheap and poor fertilizers.

"Retaining our legislative agent at Harrisburg.

"Adequate appropriations covering damages for killing tubercular cattle.

"Adequate appropriations for State College.

"Discontinuance of appropriations to private schools or colleges.

"Imposition of taxes on natural resources at the source, similar in trend to the tonnage tax on coal.

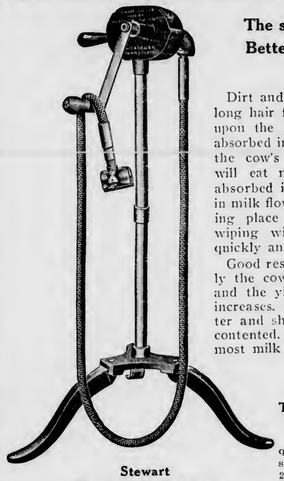
"Enactment of more rigid trespass laws.

"Enactment and enforcement of more rigid laws to prohibit the outlawed traffic in intoxicating liquors."

The following officers were elected to serve for the ensuing year.

Master, Philip H. Dewey, Games Tioga County; overseer, Roland N. Benjamin, Bradford; lecturer, John H. Light, Lebanon; steward, J. W. Stufft, Somerset; assistant steward, J. J. Cleland, Washington; chaplain, Rev. G. W. Hatch, Huntingdon; treasurer, Frank Willits, Delaware; secretary, Fred Brenchman, Carbon; gatekeeper, M. A. Spleon, Elk; ceres, Mrs. W. P. Caldwell, Allegheny; pomona, Mrs. Louis Taylor, Rodgers, Washington; flora, Mrs. C. C. Rankin, Chester; lady assistant steward, Jennie Cole, Northampton; executive committee, William Armstrong, Luzerne; finance committee, John Dale, Center; Keystone Grange Exchange, W. R. Tucker, Crawford.

WHY CLIPPED COWS ARE MORE CONTENTED and PRODUCTIVE



The second of a series on Better and Bigger Milk Production

Dirt and filth adhering to the cow's long hair for any length of time, mat upon the skin. Part of this filth is absorbed into the system. This affects the cow's condition—either the cow will eat more feed to combat the absorbed impurities or it will fall off in milk flow. Clipping leaves no clinging place for filth. That is why wiping with a damp cloth cleans quickly and thoroughly.

Good results follow clipping. Usually the cow does better on less feed and the yield of milk and butter-fat increases. Her condition is much better and she is more comfortable and contented. Contented cows give the most milk and richer milk.

Two to Three Quarts More Milk Daily

My cows gained from 2 to 3 quarts per day since clipping. It sure makes the cow look at least 20 per cent better and cows are kept clean with one-fourth the work. Makes cow comfortable. In selling, the difference in each cow when clipped would pay for the machine. In the spring, cows make milk instead of hunting the shade. It takes a long time for some cows to get rid of the old coat of long hair.

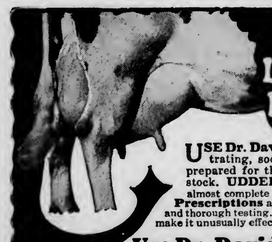
C. O. Woodall, Marcus, Iowa.

Stewart No. 1 Ball Bearing Clipping Machine

The best made. It's ball bearing. Turns easy. Strong, sturdy and lasting. Anyone can do a good job with it. Easily moved about. Equipped with our latest model 1901 clipping head and new process Stewart cutting plates. Has flexible shaft 6 feet long. Clips cows, horses, mules and other livestock without any changing.

Price f.o.b., Chicago, $14.00

CHICAGO FLEXIBLE SHAFT COMPANY
5564 Roosevelt Road, Chicago, Illinois
World's Largest Makers of Clipping and Shearing Machines



DON'T Let Udder Trouble - Ruin Your Best Cows

USE Dr. David Roberts UDDER BALM, a penetrating, soothing and healing ointment especially prepared for the treatment of udder trouble in all livestock. UDDER BALM is the newest addition to the almost complete line of Dr. David Roberts Prepared Prescriptions and is the final result of careful experimenting and thorough testing. The peculiar properties of UDDER BALM make it unusually effective in the treatment of all udder trouble.

Use Dr. David Roberts Udder Balm

for Caked and Inflamed Udder, Garget, Mammitis, Bloody Milk, Chapped or Inflamed Teats, Bruises.

You cannot afford to be without this preparation that means relief and comfort for your cows and the satisfaction on your part of knowing that there is no udder trouble in your herd.

For Sale by Dealers Everywhere. If no dealer, send direct. Half-pound can 50c Postpaid.

Write for free copy of the Cattle Specialist and how to get the Practical Home Veterinarian without cost.

Veterinary Advice Free

DR. DAVID ROBERTS VETERINARY CO., Inc.
153 Grand Avenue, Waukesha, Wisconsin

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY

PAINTS AND VARNISHES

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EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

ANNUAL REPORT OF THE PHILADELPHIA INTER-STATE DAIRY COUNCIL FOR 1924

R. W. BALDERSTON, Secretary

The first place in the annual report of the Philadelphia Inter-State Dairy Council must be given to that of its Quality Control Department. This department one year ago was directed to administer the new regulations covering the collection and distribution of milk which had been unanimously agreed to by the Inter-State Milk Producers' Association at its annual meeting, December, 1923, and thereafter approved by the dealers contributing to the Dairy Council.

(This report in detail was published in the December issue of the Milk Producers' Review).

NUTRITION DEPARTMENT

Nutrition Classes in Philadelphia

The Health Instruction classes are now an important part of the Department of Medical Inspection. Last year there were fifty six health instruction classes; seven open window classes; two nutrition classes in hospitals, benefiting about 1800 children in Philadelphia and using about 25,000 quarts of milk.

In addition, one clinic class in Chester, reaching about fifteen children weekly; two health instruction classes, Ephrata, reaching about sixty children weekly; one health instruction class, Steelton, reaching about thirty children weekly were conducted during the school year.

Milk Service

The use of milk at school began about three months after the Dairy Council was organized, being organized largely as a remedy to correct under-nourishment. Four nutrition classes, numbering about one hundred and fifty children, were taught its value and the amount gradually increased until they could take a quart a day. These so-called Health Instruction classes gave such splendid results that it set parents clamoring for milk for all the children, with the result that two years ago the Superintendent of Schools issued a special letter to principals with reference thereto.

With the sale of milk becoming general, it no longer remained in the "medicine class" but now became a health food. The testimony of many principals has been that milk has become so much a part of their school program that they would not like to teach school without it. It helps discipline, school grades, and better community co-operation.

The service becomes more difficult with the over-crowded conditions and some schools have had to give it up, but about half the schools are serving from 40 to 700 bottles daily. In one school this fall where milk had never been served before, after preliminary work the first order was for 178 bottles, increasing to 330 bottles two weeks later.

Cooking Demonstrations

Cooking Demonstrations were held in the following places:

Public Schools, Settlements, Visiting Housekeepers Bureau, Phipps' Institute, and in Health Centers.

Total of Food Dem. (Oct. 1923-Oct., 1924)	130
Total Attendance (adults)	5,340
Total Attendance (children)	852
Average attendance (adults) each meeting	60
Average attendance (children) each meeting	10

This work has been unusually successful and we are planning to enlarge its scope next year.

Trenton

One of the most outstanding phases of work in Trenton has been the work in the factories. This has taken the form of noon time talks and has been with girls only. Twenty-four talks were given in seven different factories. Work has also been done in the Y. W. C. A., (two supper clubs,) the Y. M. C. A., (community meeting with "Health" as the subject held in collaboration with the Y. W. C. A. and Saturday afternoon talks with the Junior Boys' Club.) The other Trenton work was of a routine nature.

Wilmington

In Wilmington a complete program was carried on in the public, parochial and a few of the private schools. Besides the schools, work was done in a settlement house, health centers, Y. W. C. A., and a day nursery. A limerick contest, through the courtesy of the Wilmington "Every Evening" completed the list of activities in Wilmington, to which many clever responses were made.

Marcus Hook and Chester

Total number of talks	45
Number of people reached through stories, demonstrating, supper clubs and limerick contest	7,250

Work was done in the public schools and Y. W. C. A. At the same time as the Wilmington limerick contest, one was held in Chester for eight weeks. Two thousand children in five states were reached: Pennsylvania, New Jersey, New York, Delaware and Maryland.

Contests were also conducted in Lancaster and in Chester, Pa.

Atlantic City

In Altantic City, N. J., a series of five lessons, "Healthland" was given in all elementary schools in that city. The number of talks given in Atlantic City was 97 with a total attendance of 30,584 persons.

Work With Colored People

Much interest has been manifested in full program of all the Dairy Council activities which has been carried out in the colored group.

Total number of talks	386
Number of adults reached	7,966
Number of children reached	13,663
Total number colored people reached	21,629

GENERAL SUMMARY OF NUTRITION WORK

School Year from November 1923 to November 1924

Interviews	715
Stories and object lessons	1,440
Lectures	296
Slide talks	51
Evening Meetings	51
Exhibitions	14
Movies	24
Supper clubs	88
Attendance (children)	181,580
Attendance (adults)	28,761
Total attendance	210,341
Food demonstrations	130

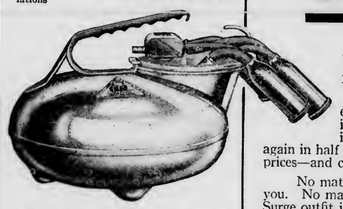
Camp Joy

In the summer of 1924, Camp Joy, a camp for undernourished children, was re-opened by the Visiting Nurses Association of Reading. The camp was reorganized this year and the office of

(Continued on page 11)

Grade "A" Milk GUARANTEED!

Grade "A" milk brings a premium of 40c per cwt. in most city markets. The minimum bacteria count for Grade "A" varies in different markets, but users of the Pine Tree Surge find no difficulty in meeting the strictest regulations



Here is the Pine Tree Surge unit. See how the milk travels but 4 inches from teat to pail. Pulsator guaranteed three years—even against wear. Every part guaranteed not to rust.

The Simplest Teat Cup Made

Just the shell and the inflation.

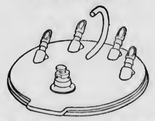
No threaded caps—no tools needed. No rubber to stretch.

One jerk and it comes apart.

One push and it goes together.

So simple that the whole unit is taken apart for washing in 20 seconds—and put together again in half a minute.

No Claws to Wash—Just This Simple Pail Lid



A half turn and off comes the pulsator with its air tubes.

Only metal parts to be washed are the lid and pail. No claws!

Why We Call It the "Surge"

You will know at once when you see it work. That surging action—back and forth, gets the milk as no milker ever got it before. Cows that would never give down their milk to a machine milk out DRY with this wonder milker. It sucks from the front, just like a calf. It gets the strippings as no machine ever got them. For two years it has been milking a herd of freak cows that we got together to put this machine to the most difficult test that any milker ever had to meet.

The Pine Tree Surge will produce Grade "A" milk in YOUR barn. We guarantee it! And we don't expect any man to buy until we prove it absolutely.

Any farmer who can produce Grade "A" milk by hand can do it with the Surge—do it easier—at much less cost—and keep the bacteria count consistently lower. Even when producing premium milk, you will care for the Surge in one-fourth the time spent by the average farmer in washing an old type milker. You take it all apart for washing in 20 seconds—put it together again in half a minute. Any farmer willing to follow our simple directions can sell his milk at top premium prices—and cut his labor production cost in half.

No matter what your past experience with milking machines has been, we guarantee to prove this to you. No matter how little faith you have in our ability to make good, we will gladly install a Pine Tree Surge outfit in your barn, on the definite FREE Demonstration plan outlined below.

PINE TREE SURGE

Only 4 Pieces of Rubber to Wash

No Long Tubes--No Claws

Every milker ever put on the market was claimed "easy to wash." But men who tried to keep them in condition to produce clean, low count milk found it a different story. In the hands of the average man it was impossible. If one did spend enough time to keep his machine really clean, he used up all the time he had saved in the milking process.

The Surge is so easy to keep sanitary that any man can do it. Just ordinary common cleanliness will keep it producing Grade "A" milk every milking. Why not? There are only the four teat cup inflations—that's all the rubber that touches the milk. No long tubes. No places for milk to lodge and breed bacteria. There are no claws or other complicated metal parts to clean—just the simple lid and pail.

How We Prove These Things To You

We have made some broad claims. We can prove them all. Let us show you. To the first man in every community who takes advantage of our offer, we will give a FREE Demonstration. We will install a complete Pine Tree Outfit in your barn so that you can see it work on your own cows. We will show you how simple and easy it is to produce Grade "A" milk. After we have done that, you decide. If you are not thoroughly convinced that you can do, day in and day out, what we have done for you, the outfit will be taken out and you do not owe us one cent. It's all up to YOU.

Mail the Coupon Today

Why shouldn't YOU be the one in your locality to take advantage of this special offer? If we make good, it means money in your pocket—a higher price for your milk and less cost to produce it. Fill in the coupon now and see your cows milked cleaner, quicker, better and with less chance for udder trouble than the best hand milker can do the job.

EASY TERMS

Any man who wants to buy a Pine Tree Surge Outfit after our free demonstration, can make a deal to pay for it on very easy terms. We'll figure with you to keep the cost down by using any equipment you may have already installed in your barn. You'll be surprised how little it will amount to. Fill in the coupon and mail it right now. It doesn't obligate you to do a thing but listen to the proposition we have ready to make you. Mail the coupon at once!

PINE TREE MILKING MACHINE CO.
Dept. 26-91, 118 N. Warren St., Syracuse, N. Y.

CHICAGO	MINNEAPOLIS, MINN.	BERKELEY, CAL.
2843 West 19th Street	750 North Washington Ave.	2445 Prince Street

Pine Tree Milking Machine Co., Dept. 26-91
118 North Warren St., Syracuse, N. Y.

Please send me, without cost or obligation, your special offer on the Pine Tree Surge Milker.

I milk.....cows. I have electricity. Current..... Voltage.....
I do not have electricity. (Cross out the one which does not apply.)

Name.....

Address.....

R. F. D. .....

"Health Recipes"

A NEW COOK BOOK

Just the Thing for Every Housewife

Containing methods of using the health-protecting foods, milk and its products, fruits and vegetables

"Health Recipes" has thirty-six colored illustrations, and contains more than one hundred and seventy-five recipes in addition to seasonal menus.

A valuabe recipe book for the home kitchen. Useful also for teachers of cooking and home making. It is so arranged that it may be retained as a complete book, or separated into forty-five cards to fit into a standard size recipe box file.

Special Price to Inter-State Milk Producers' Association Membership

25c Postpaid

GET YOUR ORDER IN NOW

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING
1211 Arch Street
PHILADELPHIA

WHAT SHALL WE HAVE TO EAT?

Suggestions From Nutrition Department of the Philadelphia Inter-State Dairy Council

With winter comes a still greater problem of "What Shall We Have to Eat." Green foods are quite out of the question and we must depend on those that are seasonable for our diet. The reliable white potato, always obtainable is probably the basis for our meal and the thing for us to do is to serve this vegetable in as many varied ways as possible and to the greatest advantage. Use the potatoes with their skins frequently, either baked or boiled. As many minerals valuable for growth and repair for the body lie just inside the skin and all these are lost if potatoes are pared. Potatoes may be used to a great advantage with left-over meats; other vegetables or in soups. Here are a few ideas which may be new and of varied form for the housewife:

1.—Stuffed Baked Potato—Select medium seized potatoes. Bake until soft. Cut in half, scoop out the inside, mash and beat with hot milk or cream, salt and butter until moist and fluffy. Replace in skins, cover with grated cheese and place in the oven until cheese is melted and browned.

Note: Be sure the potatoes are washed thoroughly. A small scrubbing brush is advised for this, so that people may eat the skins.

2.—Scalloped Potato with Ham: Cut left-over ham in small pieces. Place in a baking dish and cover with layers of sliced cold boiled potatoes. Add salt and pepper an cover with cream sauce, lifting potatoes with fork to allow sauce to moisten all parts. Bake about 20 minutes in a moderate oven.

3.—Stuffed Cabbage: Take left-over meat ends, etc., grind or chop finely and mix with left-over mashed potatoes. One egg beaten, a little onion juice, salt and pepper and enough milk to moisten. Select a large head of cabbage and allow it to stand at least one-half hour in salted cold water. With a small knife remove the heart of cabbage and fill this center with the above mixture. Bake in a moderate oven until cabbage is tender. Slice with a carving knife and serve as the main dish of a meal.

4.—Potatoes with Cheese Sauce: Rice boiled potatoes, cover with medium cream sauce, to which has been added one-half cup of rich American cheese grated. Heat through thoroughly, either in a double boiler on top of the range or by turning a buttered baking dish and placing in the oven.

Note: Cream sauce—2 tbsp. butter, 2 tbsp. flour, 1 cup of milk, and season to taste. Melt butter, add flour, milk and seasoning. Cook until it is a smooth creamy consistency, about 20 minutes.

PRESENT POULTRY SITUATION PRESENTS NO DANGER TO PUBLIC HEALTH

No grounds exist for any public fear of endangering human health from the diseased condition of poultry against which a number of states and cities have placed embargoes. This is the comment of officials of the United States Department of Agriculture who have been studying the situation and who are convinced that measures now being taken by the health authorities at the various markets are adequate to assure the public that all poultry now being offered for sale is healthy stock and safe to purchase and eat. "The embargoes have been declared", stated Dr. John R. Mohler, Chief of the Bureau of Animal Industry, Department of Agriculture, "primarily as a protection of the poultry flocks of the states concerned and not through the necessity of protecting the public health." As a protection to the poultry industry every effort should be made to prevent the spread of the disease. The department believes that it is most important that the receiving centers supplying poultry to the cities should be cleaned and thoroughly disinfected under competent inspection. Also live poultry cars and poultry fattening plants should be cleaned and thoroughly disinfected. Furthermore, farmers and poultry producers in all parts of the country are advised to report immediately to the state authorities concerning any unusual symptoms and isolate any suspected birds. The department feels that if proper precautions are taken by all concerned the trouble will rapidly subside.

During these long evenings it might be a good idea to map the farm and lay out the fields and crops for the coming season.

NATIONAL BOARD OF FARM ORGANIZATION MEETING

The National Board of Farm Organizations will hold its mid-winter meeting in Washington, D. C., February 3rd and 4th.

Among the questions discussed will be ways and means of securing equality for agriculture as compared with other industries. The delegates will also be asked to take up the question of proposed federal legislation restricting the rights and freedom of cooperatives.

It is proposed to make this February meeting a get-together conference of many farm leaders, including others than those associated with our group." declared Hon. Charles S. Barrett, chairman of the Board and president of the National Farmers' Union. The present position of agriculture requires united action. If we can get united action among the farm leaders themselves there is very little that agriculture really wants of government but can be had.

A number of special meetings of national farm organizations will be held in connection with this meeting. Among them are directors' meetings of the National Farmers' Union, The National Cooperative Milk Producers' Federation and the American Council of Agriculture, all of which will meet in the Board headquarters, February 2nd.

The National Board of Farm Organizations speaks on these matters only where its members are unanimous. When so doing it voices the concerted views of over 800,000 organized farm families.

Pennsylvania's largest exhibition of farm products is in progress. The sentiment of all representatives at the meeting was to the effect that the exhibits in every department will equal or excell those of past years.

ELECTRIC FARM SHOW

HARRISBURG, PA.

(Continued from page 1)

manufacturers and dealers, make up the committee which is sponsoring the electrification of the farm.

The committee explains that it is not supposed that any farmer will find it practical to have all the exhibited appliances on his farm. The farm is being electrified to show in an impressive way the possibilities of electricity. To make the exhibit as complete as possible, all sorts of devices, some so recently developed, that they have never been shown to the public before, will be displayed. All the equipment to be exhibited is being donated by manufacturers and dealers.

Every appliance will be shown in its proper place on the farm and specialists will be present to explain various features and to answer questions, C. K. Steinmetz, manager of the exhibition, states. The farm will be open to the public from January 14 to 24, and special effort will be made to take care of all interested farm products show visitors during the week of January 19.

PENNA. FARM PRODUCTS SHOW

HARRISBURG, PA.

(Continued from page 1)

hold their meeting the same afternoon. The Holstein Breeders will have their meeting Wednesday afternoon and a banquet the same evening. The Pennsylvania Guernsey Association have scheduled their meeting for Thursday afternoon, January 22, in the Penn-Harris Hotel. It will start with a luncheon at 12.30 and the Breeders will be addressed by Carl B. Musser, Secretary of the American Guernsey Cattle Club.

The State Horticultural Association of Pennsylvania will hold its annual meeting starting Wednesday morning, January 21. The State Vegetable Growers' Association start their meeting Tuesday afternoon and continue until Wednesday night.

The Pennsylvania State Beekeepers' Association will have a two-day program starting Wednesday morning, January 21, in the Fahnstock Hall, Y. M. C. A. building. The Pennsylvania State Poultry Association will hold a two-day meeting in the Assembly room, State Chamber of Commerce, starting January 21. On Thursday morning, E. J .Lawless, Jr., of the State Department of Agriculture will discuss "The Standardization of Pennsylvania Chick Industry." Professor R. A. Dutcher of Pennsylvania State College will give an illustrated talk on Vitamines in poultry nutrition.

Other organization meetings during Show Week include Society of Farm Women, Pennsylvania Potato Growers Association, Pennsylvania Tobacco Growers Association, Pennsylvania Farm Bureau Federation, Pennsylvania Association of Dairy and Milk Inspectors, Pennsylvania Farmers Co-operative Federation, Pennsylvania State Veterinary-Medical Association, and the Pennsylvania Threshermens' and Farmers' Protective Association.

The boy's judging contests will be held again this year for the ninth time under the direction of the Pennsylvania Department of Public Instruction. These contests will consist of judging corn, potatoes, poultry, swine and dairy cattle. A new feature this year will be the awarding of medals to the boys who conducted the best agricultural products during 1924.

By Golly! She did it!

"Two cents more for feed and six cents more in milk! On my twenty cows, that's 80¢ extra profit a day, or $24.00 a month. Believe me, I can use that extra $24.00 that Cow Chow made.

"For the past two or three years those Purina people have been writing me about using milk scales and milk record sheets. But I never thought seriously about it till just recently. I got to figuring that if they are always so anxious to have us dairymen weigh our milk and keep records of our cost of *producing* milk, there must be something to their Purina Cow Chow after all.

"Sure it's a little trouble to keep records, but it's *mighty* little trouble considering the extra profits you can make."

If you haven't one of those Purina "More Profits Cards," send for a free one right away—and don't forget to ask for the 100-page Cow Book. It's a whole "short course" on dairying. The Purina coupon brings it free.

Purina Mills
854 Gratiot Street, St. Louis, Mo.
Seven Busy Mills Located for Service

COUPON
PURINA MILLS, 854 Gratiot Street, St. Louis, Mo.
Kindly send me without obligation a copy of the 100-page Cow Book and a Purina "More Profits Card"—free.

COW CHOW CALF CHOW

DISEASED COW FOUND TO SPREAD TUBERCULOSIS

The great danger to both human lives and to livestock resulting from a tuberculous cow being present in the herd is emphasized by Dr. T. E. Munce, State Veterinarian. He warns against the keeping of a cow in the herd which shows evidence of a diseased or inflamed udder. Milk from such cows should never be fed to livestock much less used for human consumption, he states. The milk supply of an entire community can very easily be contaminated by the milk of one diseased cow. Dr. Munce cites the following actual case of the consequence of keeping a diseased cow in the herd:

A cow in a dairy herd developed an inflammation of the udder. The sore quarter failed to respond to treatment, finally involving the entire udder. The animal was eventually destroyed and an examination of the udder proved it to be tuberculous.

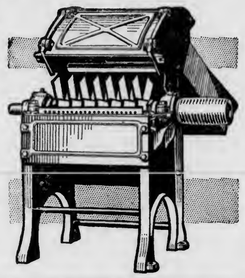
Milk from this cow had been fed to some calves in the herd. When tuberculin tested, five of the calves, all less than a year old, reacted to the test. On examination, all showed evidence of tuberculosis, one of them being generalized. This is but one of many similar cases which have come under observation and proves the danger of an infected milk supply to both animals and humans, also the care needed in close supervision of the udders which usually act as the direct source of spreading infection.

ALFALFA-GRAIN-FODDER
GROUND IN A HURRY

Better Feed at Less Cost

Grind any feed grown, either separately or together—coarse or fine. Alfalfa, corn fodder, soy beans, etc., or grain ground fine enough for slop. Simple and trouble proof. Timken roller bearings. Not a bolt or rivet in the W-W Grinding Cylinder.

4 SIZES—ELEVATOR OR BLOWER
W-W GRINDERS
(Hammer Type)
Grind and Mix Your Own Feed.
Make Better and Cheaper Feed.
"Ten Years of Successful Service"
"A WONDER ON SOFT CORN"



Eastern Sales Co., Distributors,
West Chester, Pa.

Without obligating me in any way, please send price, samples of ground feed and literature on W-W Grinder.

Name .....
Address .....
I have a Tractor.....HP Engine.....HP

The Formula Never Changes!

Larro THE SAFE RATION FOR DAIRY COWS

The name "Larro" on a bag of dairy feed means that the contents are of highest quality, and that the formula never changes. One bag of Larro is exactly the same as any other, regardless of when or where purchased. We pledge ourselves to a continuance of this policy, which 13 years ago was written into our manufacturing creed.

Ask your Dealer 529

THE LARROWE MILLING COMPANY, Detroit, Michigan

Cherry-Bassett Company
Complete Equipment for handling Milk and its Products
CHERRY-BASSETT COMPANY BESTOV MILK PRODUCTS EQUIPMENT
CANS, CAPS, BOTTLES, PAILS, SEPARATORS, COOLERS
STERILIZERS, BRUSHES, TESTERS ETC. IN STOCK
2324 Market St., PHLA. 33 So Charles St. BALTIMORE

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE
PRINTER
BELL PHONE No. 1 WEST CHESTER, PA.

ACREAGE PLANTED TO WINTER WHEAT SHOWS INCREASE

High prices have stimulated the seeding of winter wheat and rye this fall.

Statistics have been announced showing the acreage seeded to have been 42,317,000 acres, an increase of 6.5 per cent. over last year.

The increase in rye is estimated at 8 per cent.

Don't go into debt to buy feed for poor cows.

COW TESTING TELLS

Guesswork does not tell which cows of the herd pay and which ones are boarders. Cow testing records compel every cow to stand up and face the music. Only those cows that can give a good account of themselves deserve to accept the hospitality of any dairy farmer.

COW COMFORT IMPORTANT

Abundant light and ventilation are essential for cattle comfort and high milk production. Plan now to remodel stables to provide these essentials.

BUCKS COUNTY FARM PRODUCTS SHOW

The Bucks County Farm Products Show was held at Doylestown, Pa., December, 16, 17, 18, and 19. There was an elaborate display of apples, corn, potatoes, milk and home economics products.

The exhibits on the whole were larger and more elaborate than those of the previous year.

Buckingham community won the county banner, having a big lead over all others, largely as the result of the numerous prizes won by the women in the home economics department.

Points made by the ten leading communities were as follows: Buckingham, 179; Plumstead, 80; Richland, 77; Solebury, 73; Edgewood, 58; Southampton, 51; Great Swamp, 45; Cedar Ridge, 41; Pineville, 37; and Springfield, 27.

Exhibitors in the milk section were numerous. Prof. L. W. Morley, who judged the milk said "that the milk shown was above the average in quality." It was also remarked, in view of the fact that the first prize has been won two years in succession by the same man, that it is possible to produce consistently good milk by good methods.

Clarence Smith, of Pineville, with a score of 99.05 points, won the first prize and also the silver cup offered by the Eastern Guernsey Breeders' Association.

The ten highest scores and prize winners were as follows:

Clarence Smith, Pineville	99.05
John Lout and Son, Buckingham	97.90
W. W. Gross, Buckingham	96.65
J. Iden Smith, Pineville	96.05
Hubart Walton, Solebury	95.90
E. J. Radcliffe, Lahaska	95.70
Hugh Michener, Solebury	95.15
Joseph S. Briggs, Yardley	94.45
Harry Vasey Buckingham	94.00
W. S. Torbert, Newtown	94.00

During the period of the show the Philadelphia Inter-State Dairy Council presented various plays showing the development of its program toward the education and advertising the greater consumption of milk as a food.

REPORTS 771 COWS GIVE HALF TON MILK IN MONTH

Seven hundred and seventy-one cows gave more than 1000 pounds of milk, and 565 cows produced more than 40 pounds of butterfat in 26 Keystone cow testing associations during the month of October, according to the November monthly report of C. R. Gearhart, dairy extension specialist of the Pennsylvania State College, in charge of cow testing work for the state. There were 8256 cows tested during the month.

Two registered Holsteins, owned by A. C. Yoden of the Mifflin County Association, made the highest milk records for the month, 2508 and 2303 pounds respectively, and the third highest producer was registered Holstein, owned by Alex. Martin of the Butler County Association, which produced 2188 pounds. A registered Holstein owned by Albert Sarig of the Northern Berks Association, was highest individual cow in butterfat production with 87.3 pounds.

The Mifflin County Association had the highest 10-cow average in butterfat, 61.7 pounds. The Uwchland Association, W. H. Shingle, tester, had the highest number of cows on test, 561. The five highest associations in number of 40-pound butterfat cows were: Butler County, 52; Edinboro (Erie), 39; Laurel Hill, 31; Uwchland, 30; and Montgomery, 29.

MONTGOMERY COUNTY FARM PRODUCTS SHOW

The Montgomery County Farm Products Show was held at Norristown, Pa., December 2, 3, 4 , 5 and 6, 1924.

The number of entries, in the various classes were as follows, corn 83, fruits 150, milk 25, canned goods 80, honey 16, eggs 22, potatoes 38, together with 12 miscellaneous exhibits. The attendance during the show numbered over 2000.

The milk exhibit, was of particutar interest. A silver loving cup was offered as first prize by the Supplee-Wills-Jones Company of Philadelphia, and together with a cash prize of Five Dollars was won by I. R. Zollers, Gilbertsville, Pa., with a score of 97.75.

Other prizes were offered by the Peoples Sanitary Dairy, Norristown; Abbotts Sanitary Dairies, E. A. Baldwin, and Charles Gross of Philadelphia.

The following scores were made by the milk exhibitors.

MILK SCORES

I. R. Zollers	97.75
Mrs. Howard Bieler	97.25
W. H. Kratz	96.90
Earl Kirkner	96.45
E. A. Campbell	96.25
A. J. Fell	96.00
Newton S. Gottschall	96.00
Robert McPherson	94.30
A. K. Rothenberger	94.15
H. D. Allebach	93.60
I. W. Enswiler	92.65
S. C. Kriebel	91.75
C. Wm. Haywood	90.00
I. H. Hallowbush	99.25
F. B. Kulp	87.75
Isaiah Cassel	90.70
Amos Schultz	89.95
Vincent Alderfer	90.40
C. D. Kagey	88.90
Charles E. Wismer	84.20
James Kline	89.95
W. H. Landis	79.05
A. Z. Schaeffer	90.55
Levi Schultz	89.25

The judges at the show for corn and potatoes were, N. H. Schmitz, Agronomy Extension Department, State College; milk, L. H. Morley, Dairy Extension Department, State College; eggs, L. W. Steelman, Poultry Extension Department, State College; fruit, Dr. S. W. Fletcher, Horticultural Department, State College; canned goods, Miss Madge Bogart, Home Economics Extension Department, State College.

Dr. A. Peterson of New Jersey Experiment Station addressed the fruit men on Wednesday evening on Oriental Peach Moth and Japanese Beetle. Thursday evening and Friday evening the Inter-State Dairy Council presented a play entitled "Health Circus."

PERFECT GIRL GIVES SECRET

Credits Success to Plenty of Sleep; Avoids Rouge and High Heels

Chicago, Dec. 6—Miss Inez Harden, of Drew, Miss., judged the most nearly perfect girl of 350,000 in the health contest in connection with the International Livestock Exposition with a rating of 99.04 per cent, gave as her recipe for perfect health:

Sleep ten hours a night.
Drink a quart of milk a day.
Eat lots of vegetables.
Don't use face powder or rouge.
Don't wear high heels.

Miss Harden is 16, weighs 117¾ pounds and is 5 feet 2 inches tall. She goes to bed every night at 8 and is up at 6.30.

(Exchange)

ANNUAL DAIRY COUNCIL REPORT

(Continued from page 6)

director given to a member of the Philadelphia Inter-State Dairy Council staff, who in turn was given the privilege of selecting her own assistants.

DRAMATIC DEPARTMENT

Certainly the most important feature of the dramatic work of the Dairy Council in the past year has been the use of the new play, "The Health Circus." This play has been given in city and country by all kinds of groups of boys and girls. It has been found equally satisfactory in other Dairy Councils and other parts of the United States. There was no health play for boys of junior high school age which features one aspect of boys' psychology at its best. The play was most cordially received by a large group of farmers at the Farm Products Show at Harrisburg last winter and the American Jersey Cattle Club paid all the expenses of the group of Philadelphia school boys to give the play at their annual meeting in New York last May.

The Department, as a whole, has functioned along very much the same lines as heretofore. The amount of work which has been done has been in excess of that of any previous year due to standardization of the program and of the business of putting on plays and closer contacts in arranging for stories and talks in assemblies.

Two new plays have been prepared during the year by the Dairy Council here and are now ready for general use; —one playlet called "Health in Toyland", written by Myrtle L. Barger, is particularly successful as a lesson to little folks. It has been used successfully also, as a part of the parent-teacher program. "The Scarecrow" is a play for high and junior high school girls, by Charles Summer, the author of the "Health Circus", and will fill the same position with girls as the "Circus" does with boys. The few times it has already been shown it has demonstrated its worth and availability as a health play. The Dairy Councils have all approved this play and are retaining to themselves for the time being the use of it, just as in the case of the "Health Circus."

Number of performances by Dramatic Department including talks, plays, slides, and movies..	1,259
Number of people reached	332,738
Number of talks, 1923	613
Number of talks, 1924	1,259
Attendance, 1923	145,328
Attendance, 1924	289,437

Publicity

One of the outstanding features of publicity this year was the limerick contests carried on in four cities and in the main line district just outside of Philadelphia. The four cities were Harrisburg, Lancaster. Wilmington and Chester. The limericks appeared every week for eight weeks in the papers that were cooperating, accompanied by a cut illustrating the health rule that the limerick represented. A small prize was offered each week for the two best limericks, by the Philadelphia Inter-State Dairy Council and in some cases an additional prize was offered by the paper. Nearly 5,000 children were in this way made acquainted with the eight health rules and with the Dairy Council.

A regular mailing list of the country newspapers has been kept and stories have been sent to them from time to time, particularly stories regarding the sanitary regulations. Approximately 175 stories have been published in the newspapers in 1924. About one-third of these were stories which have been unsolicited or which have been editorials inspired by Dairy Council publicity. About one-half of these have been in the city newspapers and the rest in the country. Two magazine articles have appeared in the Normal Instructor and Primary Plans, and one in the American Food Journal.

Paid space was used once in all Philadelphia papers to explain the significance to consumers of the new sanitary regulations. Advertising has been used in four magazines read by teachers.

The Milk Producers' Review, published by the Inter-State Milk Producers' Association has given liberal space in its various issues advising the public as well as the members of the Dairy Council, of our various activities throughout the year.

Exhibits

The Dairy Council had exhibits at the following fairs and food shows:

The Wilmington Fair, The Reading Fair, New Jersey State Fair at Trenton, the New Jersey State Farm Products Show, Philadelphia County Farm Products Show, Montgomery County Farm Products Show, Pennsylvania State Farm Products Show, the convention of teachers of Physical training at Atlantic City, and the Convention of the National Education Association at Washington, D. C.

The Council participated in a Milk Consumption Survey of the United States Department of Agriculture noticed in a previous issue of the Milk Producers' Review.

Plans for Work Next Year

Plans for the coming year include a continuation of work along the same lines as the past year, with particular emphasis on the following:

1. The standardization of school milk service.

2. Co-operation with schools in school-wide programs including the stimulation of milk sales.

3. Extension of work with adults through increased number of food demonstrations and parent teachers meetings.

4. Co-operation with milk dealers in drivers' education.

5. Co-operation with normal schools in health education.

6. Enlarged use of exhibit material.

7. Special effort to bring to the attention of the people in the city the work of the Quality Control Department.

8. To make use of information gained through the recent surveys.

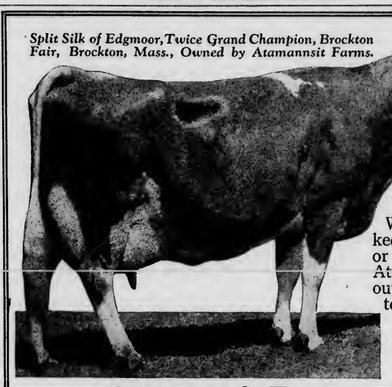
None of these items need much explanation except three.

2. The cities within the Philadelphia Milk Shed are becoming more interested as time goes on in the subject of milk distribution through the schools. The Council is already co-operating as far as it is possible in eliminating many of the difficulties which are connected with such distribution and endeavoring to make the way as easy as possible for schools to avail themselves of the opportunity to help the general health of their children through a mid-morning lunch of milk and perhaps a cracker.

4. We have already been trying out in a small way co-operation with the dealers in education of the milk drivers as to the wonderful properties of the product which they sell, the care which is being given to its production on the farms supplying Philadelphia and endeavoring all the time to help the drivers to be able to answer more intelligently the questions which are always coming to them from the housewife.

7. The work of the Quality Control Department has proceeded to a point now where we feel that we can properly make a greater effort to present to the people of Philadelphia the unusual safeguards which are thrown around the supply of this city and of others in the Philadelphia Milk Shed.

Split Silk of Edgmoor, Twice Grand Champion, Brockton Fair, Brockton, Mass., Owned by Atamannsit Farms.



Grade Cows or Grand Champions

Whether you are developing Grand Champions, keeping pure bred or grade cows for milk, cream or butter production, the following letter from Atamannsit Farms will interest you. It brings out three important points in dairying all tending to greater profit for the man who keeps cows, i. e.

Developing better young stock—
Producing more milk—
Feeding test cows for higher records.

Atamannsit Farms, East Falmouth, Mass.

The Quaker Oats Co., Chicago, Ill. November 15, 1924

Dear Sirs—In regard to the Sugared Schumacher I must say the results from its use are very gratifying. I admire its remarkable palatability. In a herd as large as Atamannsit there would usually be several animals that do not care for a feed but I have yet to see one that is not keen for Sugared Schumacher. We have 30 yearly heifers, which due to the very dry weather, came in from pasture quite thin this fall. We have fed them Sugared Schumacher alone with silage and clover hay and the way they have picked up is a splendid testimonial to your feed—much better than I could write.

We have used Sugared Schumacher according to your directions for our milking herd and it has proven to be more satisfactory than any other feed we have used. It is the last three months on a test cow's record that count. They are pretty well filled up then and they must relish their feed or they will not keep going. For that reason I think Sugared Schumacher is the ideal carbohydrate basis for the test ration as it keeps the cows at maximum production right to the end of the test period.

—Yours very truly, HORACE M. CLARK, Herdsman in charge.

There are Many Good Reasons Why Sugared Schumacher Feed Produces Such Gratifying Results. Mr. Clark Touches on Three of Them:

FIRST the way the 30 heifers "picked up" in flesh and vigor—a result of the right kind of carbohydrates which puts animals in tip top condition.

SECOND the way the "milking herd" proved it to be "more satisfactory than any other we have used" — showing that it meets the need of the milch cow ideally and helps her to produce MORE MILK.

THIRD its great PALATIBILITY as proved on their test cows by keeping them EATING with relish and up to maximum production right to the end of the test period.

Surely these ARE sufficient reasons for any owner of cows —grade or grand champions to decide to try Sugared Schumacher Feed. But these are not all. It keeps cows healthy—satisfied and in good flesh. It is an ideal maintenance ration and when fed with **Boss Dairy Ration** with its 24% protein content, or any other good protein concentrate, you have a ration which day in and year out is the most economical and profitable from every standpoint, Also fine for hogs, horses, sheep and cattle. A hint to the wise—try it. Your dealer can supply you, if not, write us.

D-18 The Quaker Oats Company Dept. 1665 Address, Chicago, U. S. A.

DON'T LET MILK FREEZE

Milk should be kept from freezing in the cans. Frozen milk is difficult to sample, and cream frozen in the necks of the cans may result in a lower test.

A record of 18,959.4 pounds milk produced in a ten months' test period with 686.7 pounds butter makes Faforit Colanthus Posch, a purebred Holstein in the herd of John Bell, Jr., of Coraopolis, the milk champion for Pennsylvania senior four-year old cows of all breeds, according to the advanced registry department of The Holstein-Friesian Associaton of America. She carried a calf 211 days of the test.

MUTILATED PAGE

BOTANIST GIVES TEN POINTS ON WEED CONTROL

Dr. E. M. Gress, State Botanist, gives the following 10 points to aid farmers in their campaign to maintain weedless farms:

1. Sow clean seed. Ask your seedsman for the analysis of the seeds that you buy. If you are in doubt about the purity of the seed, have a sample analyzed by the Pennsylvania Department of Agriculture.

2. Allow no weeds to mature seeds. Annuals and biennials, such as corn cockle, dodder, wild mustard, wild carrot and mullein, propagate only by seed and can, therefore, be controlled by preventing their seeding.

3. Keep all leafy parts cut off close to the ground. This will starve the plants since the food is made by the green leaves and other green parts of the weed.

4. Rotate crops. Clean cultivators will assist greatly in keeping the farm clean of most weeds.

5. Be persistent in attacking weeds. Don't stop until every last evidence of the weed is gone.

6. Keep weeds out of fence rows and waste places. Weeds cannot be kept out of fields if the fence rows are infested.

7. Co-operate with your neighbors in keeping the whole community free of weeds. Discuss the subject in your farm meetings and plan concerted methods of attack.

8. Spraying with certain chemicals will kill some weeds, but in general this method is expensive and not very satisfactory when weeds are present on a large scale.

9. Get acquainted with strange weeds that are found growing on the farm. One weed can be the start of a real menace.

10. Write to your state institutions for more details on weed control. The Pennsylvania Department of Agriculture is now preparing a bulletin on how to control a number of the worst weeds found in the State.

FRAUD IN GRASS SEED SALE IS DISCOVERED

A report has reached the Pennsylvania Bureau of Plant Industry from western states to beware of an agency called Zenith Lawn Accessory Company, Kansas City, represented by Allen W. Miller.

This company is reported to be selling meadow fescue at $1.10 per pound wholesale or $1.50 per pound retail and is calling it the "World's Most Beautiful Bluegrass." An analysis by the Colorado Seed Laboratory shows that this seed is nothing more than ordinary meadow fescue which is being sold by seed houses in the eastern states for as little as 12½ cents per pound. The grass sold by Mr. Miller is called Herbae Prati in order to cover up its identity as the ordinary meadow fescue.

Dr. E. M. Gress, who is in charge of the seed analysis work for Pennsylvania, states that he will take immediate steps to prosecute guilty parties in case such misrepresentation of farm seeds is attempted in Pennsylvania.

A recent survey by the United States Department of Agriculture shows that 70 per cent. of all co-operative cheese factories in the United States are in Wisconsin, that 60 per cent. of farmers belonging to such enterprises are located in that State, and that 70 per cent of the business handled in 1923 by co-operative associations for marketing cheese was handled by Wisconsin organizations.

GASOLINE TAXES AND MOTOR FEES AVERAGE SMALL AMOUNT

The average license fee per mile of motorists in this country is one-fifth of a cent, and the gasoline taxes paid amounts to one twenty-fifth of a cent, or an average for both of one-quarter of a cent per mile, according to the Bureau of Public Roads of the United States Department of Agriculture. That is what the fees paid in a year amount to when divided by 6,000, which is believed to be the average motorist's annual mileage.

The motorist or truck operator is assured of a good return from the taxes he pays, since the receipts are very largely devoted to road construction and maintenance. In 1923, 81 per cent of the motor-vehicle license revenues and 58 per cent. of the gasoline taxes were turned over to the State highway departments for expenditure under their supervision, and a considerable portion of the remainder was expended by the counties for road purposes.

Consideration of the gasoline tax is of special interest to the motor-vehicle operator. Thirty-five States now have this form of tax, the rates ranging from 1 to 3 cents, with the exception of one State, which has a 4-cent tax. A 1-cent gasoline tax increases the cost of operating the average vehicle by less than a tenth of a cent per mile. On a trip from Washington to Philadelphia the tax would amount to 10 cents. The trip over the Lincoln Highway from New York to San Francisco would be taxed $2.50. It is interesting to compare these rates with the toll charges which motorists formerly had to pay on toll roads. On six different turnpikes in Virginia and Maryland tolls amounting to $5.05 were charged for a total of 187 miles, which is equivalent to 2.7 cents a mile. If a State attempted to charge this same rate for the use of the public highways by automobiles, it would have to establish a gasoline tax of 36 cents per gallon.

GLASS TANK MILK CARS

George G. Pennington, Manager of the Pennington Construction Co., of Kenedyville, has contracted with the Supplee-Wills-Jones Milk Company to remodel the milk plants and to put in glass sanitary tanks to hold the milk which will run into glass sanitary tank cars. These cars will deliver the milk to the city in tanks instead of in cans as now used.

The change from cans to glass tanks will cost considerable. This method of delivering milk to the city assures patrons better and cleaner milk.

The railroad company will furnish the cars but the milk company will have to supply the tanks. These tanks will cost about $10,000 apiece.

Kent farmers will now realize the importance of carrying out the rules promulgated last May for insuring cleanliness on the farm and in the delivery of milk to the cooling stations.—Kent News, Md.

Less than one-half of the corn crop in the Corn Belt States reached maturity before the first killing frost this year, according to reports received by the United States Department of Agriculture. Usually about 91 per cent. of the crop reaches maturity by that time compared with 48 per cent. this year.

Frozen water-pipes are always bad, but it seems as though they're worst in cold weather. Better see that they're all protected.

QUALITY CONTROL RECORDS

With the week ending December 20th, 1924, the records of the Quality Control Department of the Philadelphia Inter-State Dairy Council, has inspected 14,628 dairy farms, that 15,390 Temporary Permits and 3040 Permanent Permits have been issued.

This represents practically that since early in 1924, almost the entire dairy farms population of the Philadelphia Milk Shed has been called upon and the program of quality control "clean up work" begun.

As fast as possible the field representatives of the Dairy Council have personally inspected the various farms and that an active campaign of re-inspection will be started in the very near future.

EASTERN GUERNSEY BREEDERS' ASSOCIATION

The Eastern Guernsey Breeders' Association, with headquarters in the Boyertown Building, Philadelphia, Pa., announces the following officers and management committees to serve during the coming year:

Officers and Management Committees

President, G. W. Koser, Biglersville, Pa.; first vice president, M. E. Leeds, Philadelphia; second vice president, L. McL. Merryman, Sparks, Md.; secretary, M. M. Hollingsworth, Landenberg, Pa.; treasurer, I. W. Roberts, Philadelphia; L. C. Emmons, Swarthmore, Pa.; G. H. Hibberd, Brooklandville, Md.; Walter Smedley, Media, Pa.; E. T. Gill, Haddonfield, N. J.; M. A. Phillips, Pomeroy, Pa.; S. N. Root, Landesville, Pa.

Sales Committee

M. M. Hollingsworth, Landenberg, Pa.; M. T. Phillips, Pomeroy, Pa.; E. T. Gill, Haddonfield, N. J.; A. J. Fell, Lansdale, Pa.; I. W. Roberts, 1644 Land Title Bldg., Philadelphia, Pa.; L. M. Merryman, Sparks, Md.; H. B. Shenk, Sparks, Md.; G. W. Koser, Biglerville, Pa.; Lowell Gable, Paoli, Pa.

FARMERS BUY 308,298 TONS OF FERTILIZER

According to a report issued by the Pennsylvania Bureau of Foods and Chemistry, farmers in the State purchased 308,298 tons of fertilizer and 251,836 tons of agricultural lime during 1923.

The Bureau of Foods and Chemistry issued 266 licenses for the sale of commercial fertilizings during 1924, the report indicates. These licenses represent 1375 brands and kinds of material. About one-half of these brands represent high-grade mixed fertilizer containing 14 per cent. or more of plant food. That Pennsylvania farmers are still buying too much low grade fertilizer is evident from the fact that a total of 366 brands or about 25 per cent. of all brands registered during 1924 represented fertilizer containing less than 14 per cent. of plant food.

BED THE COWS

Use plenty of bedding for the cows. It is practically impossible to produce clean milk if the cows' flanks and udders are soiled. Bedding also absorbs liquid manure and saves it for use on land that needs it.

Briar patches and thorn apples may give food and shelter to pheasants and rabbits, but then you have said it all. Real honest to goodness trees—pines and hardwoods—will do as well and produce a valuable crop at the same time.

TRACTORS IN PENNSYLVANIA

Approximately 18,467 tractors were used on Pennsylvania farms during the past year. Over 3,000 more than in the preceding year.

Estimates given by the leading counties were as follows:

Lancaster	1240
Berks	956
Allegheny	918
Chester	830
Montgomery	740
Westmoreland	733
York	630
Schuylkill	592
Erie	514
Crawford	542
Bucks	480
Butler	429
Washington	412

WHY TEST SEED CORN?

Most people have heard the old saying:

"For want of a nail the shoe was lost
For want of the shoe the horse was lost
For want of a horse the rider was lost
For want of the rider the battle was lost
For want of the battle the nation was lost
And all for the want of a horse shoe nail."

Suppose we paraphrase this and say:

For want of the test the stand was lost
For the want of the stand the crop was lost
For the want of the crop the interest was lost
For the want of the interest the mortgage was lost
For the want of the mortgage the farm was lost
For the want of the farm the home was lost
All for the want of the SEED CORN TEST.

DON'T TAKE THE RISK!

BUCKS COUNTY FARM BUREAU

ONE-THIRD OF FARMERS USE CREAM SEPARATORS

About one-third of the farmers in Pennsylvania are using cream separators. The information shows that almost 65,000 cream separators are now in use in the state. This number is about two per cent. less than the number in use a year ago. Concerning this decrease, it is stated, "As the market for whole milk improves, the number of cream separators decreases. Near cities and industrial centers, very few of these machines are now in use, while in the more remote sections the number is increasing. For example, there is a steady increase in such counties as Clarion, Clearfield and Cameron but a decrease in Delaware, Chester, Dauphin, Allegheny and Washington Counties."

NEW JERSEY STATE AGRICULTURAL WEEK

The tenth annual meeting of the New Jersey State Agricultural Convention and Farm Products Show, will be held in Trenton, New Jersey, January 13th to 16th, 1925, inclusive.

The various state agricultural organizations will hold meetings during the four days.

On Thursday, the 15th, the New Jersey Holstein Friesian, Guernsey and Ayrshire Breeders Associations will hold individual meetings.

A "Dairymen's Get Together" Banquet will be held on Thursday evening.

The Farm Products Show will be held in the Armory, during each day of the Convention Week.

NEW JERSEY CLEANING DAIRIES OF TUBERCULAR CATTLE

Dairymen are Co-operating

More than doubling in the last year the number of herds under supervision, New Jersey, in common with several other eastern states, is making rapid strides toward the eradication of tuberculosis in dairy herds. Dairymen of the state have kept step with the popular demand for clean milk, and the progress has been particularly marked in those zones supplying communities where ordinances have been passed restricting the sale of raw milk.

That dairy herds once cleaned can be kept fairly free from the disease is the assertion of Dr. J. H. McNeil, Chief of the Bureau of Animal Industry of the State Department of Agriculture, whose force has been working in co-operation with the Federal Bureau of Animal Industry in the campaign. Dr. McNeil's report to the State Board of Agriculture for the year terminating June thirtieth shows that retests of herds under supervision have resulted in only about two per cent of reactors, as compared with thirty per cent, the average percentage on initial tests. The total number of herds under supervision in New Jersey at the close of the fiscal year, June 30, 1924, amounted to 1,540, comprising 25,825 animals.

Public interest in the movement to provide better milk is crystalizing rapidly in New Jersey communities since health authorities have broadcasted facts explaining the danger from the use of raw milk from tubercular cattle. Federal statistics, showing that at least forty per cent of all tuberculous children under five years of age contracted the disease from milk of tubercular cows, have indicated the extent of the menace. All milk from tubercular cows, unless properly pasteurized, is dangerous. Many cities in New Jersey now refuse to permit the sale of raw milk except from herds given a clean bill of health by the New Jersey Department of Agriculture, and require that all other milk be pasteurized. Physicians hold that raw milk from clean healthy cows is absolutely essential to the proper nourishment and growth of children, and most of the new milk ordinances provide for the sale of both the raw and pasteurized product, properly labeled.

An intensive campaign that would cover the State as rapidly as possible is said by officials of the Bureau to be the most economical method of handling the situation. New Jersey appropriated $100,000 during the last fiscal year and made a supplemental appropriation of $35,000 to indemnity owners. In addition to this amount, the State received from the Federal Bureau of Animal Industry sufficient funds to match the State Appropriation.

During the year, 35,713 animals were tested, with 4,296 reacting, or a percentage of approximately 12 per cent. All condemned cattle were slaughtered and appraisd according to the beef, dairy or breeding value of the animal and indemnity paid the owners from the State-Federal funds. During the year indemnity was paid on 3,912 animals, 488 of which were purebred and 3,424 grade animals.

New Jersey is still confronted with a large problem before the clean-up is complete, as the total number of dairy cattle in the State is estimated at 175,000, while only approximately 25,000 are under supervision. No dairyman, under the present law, is compelled to have his herd inspected for tuberculosis. It is a matter of choice with each producer, but many producers want inspection and supervision and the Bureau is daily in receipt of many requests for herd testing.

"The excellent showing of the last year's work indicates that tuberculosis can be eradicated from the domesticated animals", says Dr. McNeil. "The results attained are, in a great measure, due to the splendid co-operation given to the Bureau of Animal Industry by the breeders and dairymen in cleaning and disinfecting their premises following tests and in the purchase of herd additions originating in herds under supervision or from areas declared to be free from tuberculosis."

MARKETING MILK IN CONNETICUT

By C. E. HOUGH

(Continued from page 2)

high enough fluid price so that there is not much use in trying to bid above it.

Question—What is the net price to the farmer?

Answer—This varies according to the difference between the value of surplus milk and the price of fluid milk, and according to the per cent. of surplus. It will run all the way from ¾ cent to 1¾ cents a quart, lower than the fluid price.

At this season of the year when production is the smallest, our pool price will come up close to the fluid price. In seasons of the year when we have a larger surplus and especially when the surplus is lower in value ,the difference will often spread to a cent a quart.

Question—What are your membership dues?

Answer—A dollar per cow per year, collected through the dealer. We have had but one breach of contract on the part of a dealer since we have been doing business on the contract basis. **That dealer was so small we should** hardly count him. We have had 25 or 30 producers who have broken their contracts. We have a series of meetings every spring at which the farmers have the privilege of signing their contracts that show the number of cows owned by each farmer.

Question—How do you account for the fact that you don't get competition from long distance milk?

Answer—The regulations set up by the state are giving us standards for production that our adjoining states do not have. They have city regulations which are high, yet they have practically no state regulations of milk supply. The markets to the north of us which are most likely to annoy us have no state supervision of the milk supply whatever and our state officials would not permit milk to be brought into the state unless it was produced under conditions comparable to our own. We have been under state supervision for seven years and if they start in now, they will find us seven years ahead of them seven years **from now.**

Successful Dairymen

INSIST ON

LEWIS LINSEED MEAL

The Genuine Linseed Meal Made the "Old Process" Way

By

John T. Lewis & Bros. Company

Lafayette Building, Philadelphia, Pa.

Manufacturers of DUTCH BOY Paint Products

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.

Avoid the Winter *Slump* in milk *yield*—

The winter months are the critical period of the year for the dairyman. The herd may come through the summer showing a nice profit—only to see it wiped out by a slump in milk production, or disease, or both.

No need to suffer an annual dairy loss in winter. By investing a few cents a day in *Kow-Kare* the milk-making organs of all your cows will be invigorated so that the strain of dry feeding will not break down their production.

Kow-Kare is a medicine-tonic that acts directly on the milk-making organs, the digestion and assimilation. It builds a *permanent* vigor in these key organs, enabling the cow to thrive and milk to capacity on the regular winter diet.

To use *Kow-Kare* is a sane investment. It is health and profit insurance. Its slight cost is returned many times in the quickly-noticeable improvement in milk flow.

The *Kow-Kare* feeding plan is winning thousands of new recruits among dairymen yearly. The usual method is to feed a tablespoonful of *Kow-Kare* twice a day, one week of each month during the winter. The cost averages only about a cent a day per cow.

Begin now with *Kow-Kare*. Your dealer has it—feed stores, general stores, druggists—in $1.25 and 65c packages. Order direct if yours is not supplied.

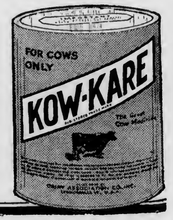
DAIRY ASSOCIATION CO., Inc.
LYNDONVILLE, VT.

Do You Have A Sick Cow!

Kow-Kare has back of it a quarter-century record of success in the treatment of such cow ailments as Barrenness, Abortion, Retained Afterbirth, Scours, Garget, Milk Fever, Lost Appetite, etc. It builds up the digestive and genital organs to a vigor that makes them function naturally.

As an aid at the Calving period *Kow-Kare* has no equal.

Send for valuable free treatise, "*The Home Cow Doctor.*"



Are You Getting Clean Milk?

If you are straining milk through cloths or fine mesh screen strainers, you are not removing all the dirt and sediment from the milk.

Thousands of milk producers have found by actual test that the

Dr. Clark Purity Milk Strainer

is the only strainer made that can possibly remove ALL the fine dirt, muck and other sediment from milk. These results guaranteed or your money refunded.

Purity Milk Strainers are used by the largest milk producers in the United States, including Borden, Van Camp, Carnation, Mohawk, and Sheffield Farms Dairies, and thousands of individual producers.

Made in two sizes:—10 quart and 18 quart. Ask your Dealer, or write us for descriptive circular and prices.

Purity Stamping Company
Dept. F Battle Creek, Mich.
Worlds Largest Manufacturers of Cotton Discs for strainers and filters.

PURITY Cotton Discs are made in any size from 5 1-2 in. to 7 in. diam., for all makes of strainers or filters. Send for a trial order.

FOOD CHEATERS PAY STATE $2,045 IN MONTH

Food cheaters in Pennsylvania paid the State $2,045 during October for their illegal acts. Director James Foust, Bureau of Foods and Chemistry, reports that the heaviest fines came from retailers who sold stale eggs for fresh ones and milk low in butter fat. The prosecutions are the results of vigerous steps taken by food law officials to eradicate cheaters and defrauders.

At this time of the year, there is great temptation to sell cold storage and stale eggs for strictly fresh ones.

PENNSYLVANIA FARMERS USE MORE SILOS

According to information recently gathered by the State Department of Agriculture, farmers in Pennsylvania are increasing their numbers of silos.

Approximately 55,000 farms have silos in use at the present time. This is 26 per cent. of all farms in the state and represents an increase of 2 per cent. over the number of farms a year ago.

According to the figures completed there has been an increase of almost 4,000 silos erected during the past year.

COW TESTING ASSOCIATIONS

NORTHERN BERKS COUNTY COW TESTING ASSOCIATION

Albert S. Sarig, of Bowers, Berks County, Pennsylvania, again leads in the production of milk in the Northern Berks County Cow Testing Association during October, 1924.

Mr. Sarig is a breeder of Holstein Freisian cows and is a director of the Inter-State Milk Producers' Association.

In the first 10 cows records, Mr. Sarig's cows ranked first and third. He also had nine other cows classed as deserving special mention.

The ten highest cows in butterfat production were as follows.

Owner	Breed	Pounds Milk	Per Cent. Fat	Pounds Butterfat
Albert S. Sarig	R. H.	1984	4.4	87.3
George Levan	G. H.	1426	3.8	55.6
Albert S. Sarig	R. H.	1736	3.1	53.8
Paul Kohler	R. H.	1581	3.8	53.8
F. B. Hollenback	R. H.	1518	3.5	53.2
J. C. Balthaser	G. H.	1612	3.1	50.0
Wm. Mertz	R. H.	1488	3.3	49.3
Paul Kohleer	R. H.	1426	3.2	45.6
Walter Sunday	G. H.	1395	3.2	44.6
J. C. Balthaser	G. H.	1369	3.0	40.9

MONTGOMERY COUNTY COW TESTING ASSOCIATION

Carl A. Sager, Tester

During the month of November, 26 herds were tested with 319 cows in milk and 49 dry. Five unprofitable cows were sold during the month. This brings the total number of boarder cows to 32, which have been disposed of in seven months of testing work. Sixty-six cows produced over 1000 pounds of milk and 31 cows went over the 1200 pound mark. Thirty-seven cows produced over 40 pounds of fat and 16 made 50 pounds or more.

The ten highest cows in the association for butterfat production for the month of November were as follows:

Owner	Name and Breed of Cow	Age Yrs.	Lbs. Milk	Lbs. Butterfat
Wm. H. Landis	No. 20, P. B. H.	3	1875	84.38
Wm. H. Landis	No. 22, P. B. H.	2	1581	66.65
Wm. H. Landis	No. 2, P. B. H.	7	1737	66.00
Wm. H. Landis	No. 4, P. B. H.	4	1656	57.96
Owen Gerhart	M. Belle, Gr .H.	7	1746	57.62
Wm. H. Landis	No. 21, P. B. H.	2	1440	57.60
Wm. H. Landis	No. 15, P. B. H.	3	1515	57.57
Levi G. Schultz, Est.	No. 6, Gr. H.	4	1449	56.51
C. Wm. Haywood	Buttercup 2, Gr. J.	9	792	55.44
H. K. Lesher	Daisy Gr. H.	8	1464	54.17

Highest herd average milk production:

Name	Cows Milking	Average Lbs. Milk
Wm. H. Landis	19	1147
Warren Schultz	13	1032
Owen Gerhart	19	986
Harvey Murphy	13	980
A. K. Rothenberger	16	938

Highest herd average butterfat production:

Name	Cows Milking	Average Lbs. Fat
Wm. H. Landis	19	42.02
Warren Schultz	13	35.12
Owen Gerhart	19	34.00
Harvey Murphy	13	32.33
C. Wm. Haywood	14	31.18

Highest herd average test:

Name	Average Test	Breed
School of Horticulture	6.27	Mixed
W. J. Hendren	5.90	Jersey
C. Wm. Haywood	5.38	Jersey
J. A. Middleton	5.10	Guernsey

The highest testing cow for the month was a pure bred Jersey owned by the School of Horticulture, her test being 8 per cent.

PENNSYLVANIA AYRSHIRE TRIO WIN SILVER MEDALS

Three more Keystone State Ayrshires have qualified a place in the bovine Hall of Fame. These three Red and Whites have produced as much as ten average dairy cows in this state in one year. The average cow produces 3990 lbs. milk while these Red and Whites have a combined yield of 41,637 lbs.

Freshening as a senior three-year-old Valley Forge Mosshawk produced sufficient milk and butterfat to gain sixth place in the breed for her age and qualify for an Association Silver Medal. Her yield of 16,618 lbs. of 4.19% milk, 677.42 lbs. of butterfat is far more creditable when it is recalled that last year, as a senior two-year-old, she was the highest producer in her class, winning a Silver Cup and a Silver Medal. She is owned by Masonic Homes Farm, Elizabethtown, Pennsylvania.

Betty's Son's Belle of Old Forge, owned by W. L. Gladfelter, Spring Grove, Pennsylvania, wins her Silver Medal in the Roll of Honor, 300 days production with calf, on her record of 11,950 lbs. of milk, 490.41 lbs. of butterfat. In the Advanced Registry she is credited with 12,687 lbs. of milk, 529.03 lbs. of butterfat. She is by Betty's Son, whose daughters with first calf are rapidly gaining for him a place among the breed's leading sires. His first eight daughters with records at an average age of 2 years and 178 days average 9578 lbs. of milk, 400.80 lbs. of butterfat, in an average period of 333 days.

Glen Foerd Farm, Torresdale, Philadelphia, is the owner of Glen Foerd Star Madonna, the third cow of the trio. She wins her Silver Medal also in the Roll of Honor with a yield of 11,075 lbs. of milk, 488.55 lbs. of butterfat. In the Advanced Registry she is credited with 12,792 lbs. of milk, 568.62 lbs. of butterfat. She is by Penshurst Rising Star, probably one of the best young bulls of the breed. His first nineteen daughters, with first calf, average 11,865 lbs. of milk, 485 lbs. of butterfat.

High grade marl gives about the same results as limestone in making clover grow, is used in the same quantity to the acre.

Uncle Ab says the needle in the haystack is a comfortable situation these days compared with the mowing machine in the snowbank.

Feel Secure

When winter comes the man who owns a Unadilla Silo knows what it means to feel *secure* about feed for his live stock.

He knows that his plentiful supply of good, succulent, meat and milk producing silage will always be in the best condition and will lose none of its valuable juices.

He knows he has a durable, strong, frost resisting and weather defying structure. Have *you* these profitable advantages? Write today for our

Big Catalog, Free

The most interesting story of silos ever written. Gives complete details of the Unadilla. Also ask to see our *liberal discounts* for cash and early orders. *Time payments if desired.* Address

UNADILLA SILO CO.
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Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

WARN AGAINST DANGER OF FEEDING MOLDY CORN

Warning against the danger of feeding moldy corn to livestock is given by the Pennsylvania Bureau of Animal Industry. One feeding of moldy corn may be sufficient to poison an entire stable of animals, according to the State officials. They say further that forage poisoning and intestinal disorders will likely occur following the feeding of moldy food. Although horses and mules seem most susceptible, all farm animals are subject to these diseases. Affected animals show symptoms of poisoning, will stagger about, and may finally die. In case such symptoms develop, state officials advise getting in touch with the local veterinarian as soon as possible.

A cream of onion and potato soup makes a mighty satisfying supper dish for these cold days. It's filling and nourishing, too.

Gleanings From the Field

MEMBERSHIP WORK IN WESTERN END TERRITORY

During the latter part of November and early December, a membership drive was conducted which covered a small portion of Frederick County, Md.; Washington County, Md.; and a part of Franklin County, Pa. This work was an extension of the campaign in that section last February which was cut short by a severe snowstorm.

A total of 136 members were signed up representing about 817 cows. Washington County locals held meetings and elected delegates to the Annual Meeting of the Inter-State Milk Producers' Association. A new local of something over 30 members was established at Middletown, Md., in Frederick County and a delegate from this branch was also elected. Most of the Franklin County, Pa., dairymen who joined were placed in the Mercersburg, Pa., local. This branch is one of the most active and enthusiastic locals of our territory. The co-operative spirit which is the heart of co-operative marketing is very evident here. Field men who canvassed in this section turned in approximately 90 per cent. of the men called upon as members. This is a mark that some of the older dairy territories can not hit.

We are indebted to the county agents and old members for their splendid co-operation in this drive. Their advice and assistance helped very materially in making the work a success and we wish to take this opportunity of extending our appreciation.

DENMARK INCREASING NUMBER OF COWS

The total number of horned cattle in Denmark on July 15, 1924, was 2,660,000, against 2,523,000 in July, 1923, an increase of about 143,000 heads, according to Smr Tidende of September 17, 1924. The number of milk cows and heifers in calf was 1,368,031, against 1,339,047 in 1923, showing on increase of about 29,000 heads only, but there was a greater increase in the number of heifers not yet in calf, about 97,500 heads more than in 1923, which indicates the intention of the dairy farmers to increase their stocks of dairy cows in the ensuing year.

BEVERLY IN LINE FOR BETTER MILK RULES

The city of Beverly, Burlington county, has joined the "Better Milk" communities of New Jersey, by adopting a model health ordinance, governing the grades of milk that can be sold in that town. This ordinance follows the specifications adopted in numerous other communities, where the campaign for a safe and sanitary milk supply has materialized into city ordinances. The aim of such ordinances is to eliminate numerous confusing grades and to protect both the public and the honest dealer. Women's clubs, health departments and county farm agents have aided in procuring the protective legislation in several counties.

ASSISTANT AGRICULTURAL STATISTICIAN AND JUNIOR AGRICULTURAL STATISTICIAN

Examinations for assistant agricultural statistician and junior agricultural statistician will be held throughout the country on January 21, 1925. They are to fill vacancies in the Bureau of Agricultural Economics, Department of Agriculture, at entrance salaries of $2,400 and $1,860 a year, with advancement.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or from United States Civil Service examiners at the post office or custom house in any city.

The farmer who milks cows and then buys oleo ought to be ashamed to look his cows in the face.

Most house plants thrive in the temperature best for healthy human beings—65 to 68 degrees F. by day, with a drop of only 10 to 15 degrees during the night.

PHILADELPHIA COUNTY FARM PRODUCTS SHOW

The Philadelphia Vegetable Growers Co-operative Association and the Northern Philadelphia Chamber of Commerce, held its second annual Farm Products Show in Philadelphia on December 5th and 6th, 1924.

Special prizes for celery, root crops, potatoes, corn and other vegetable products were awarded.

Prizes were also awarded in Home Economics exhibits for canning and preserving, fruits and baking.

The show was held in the Free Library Building, Frankford, Philadelphia.

The Dairy Council was among the exhibitors.

COW-TESTER'S HAND-BOOK RECENTLY ISSUED

A handbook for cow testers has been prepared and published by the United States Department of Agriculture which will be of considerable value and help to the men engaged in the work of testing cows for production in cow testing associations. Many testers are not especially trained for their particular work, but by following the suggestions of the handbook and the standard methods advised, they will make their records much more valuable to the dairymen, and also more useful in the various studies by the department based on such records. Every tester should have one of these handbooks; they are printed in a convenient size for carrying in the pocket.

The handbook not only informs the tester just how to do his work in the most valuable way, but also informs the owner of the herd just what he can expect of the tester. A thorough knowledge of the duties of the tester by both the tester and the owner of the herd should aid materially in promoting harmony and better cooperation in cow testing work.

A copy of the handbook, which is called Miscellaneous Circular No. 26, may be secured upon request, as long as the supply lasts, from the United States Department of Agriculture, Washington, D. C.

PENNSYLVANIA STATE CHAMPION GUERNSEY

Gertrude Claire 99550, owned by F. R. Hartzell of Renfrew, Pennsylvania, is the new Pennsylvania State Champion Guernsey in Class C. She has a record of 18942.50 lbs. of milk and 893.41 lbs. of butterfat.

A GOOD Stave Silo LOW in Price

Superiority of workmanship and quality of materials make Crasco Silos good for unusual service. Made of selected tongue and grooved stock and bound with steel rods. Doors close tight and open easily. Convenient door front ladder.

The result of years of experience in making superior silos such as the Craine Triple Wall. Write for complete information.

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BOX No. 350
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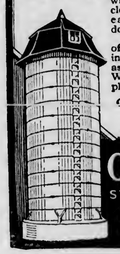

CRASCO STEEL RODDED **SILOS**

Write for this booklet KERR'S LIVELY CHICKS **Free**

"How to raise baby chicks—and make them lay in five months"

That's the way to make real profits from raising chicks. This book tells you how to get them started laying early—how to keep them producing heavily.

Kerr's Lively Chicks are bred from the stock that produced our winning hens in the last Vineland and Bergen County International Egg Laying Competitions. If you want heavy laying pullets, buy Kerr Chicks. 100% live delivery *guaranteed*—and that every chick will be vigorous and healthy upon arrival.

Write for the booklet, prices and "The Poultry Outlook for 1925." It is Free.

THE KERR CHICKERIES, Inc.
(Member International Baby Chick Association)
Box 37, Springfield, Mass. Box 37, Newark, N. J.
Box 37, Frenchtown, N. J. Box 37, Syracuse, N. Y.

CRUMB'S Chain Hanging **Stanchions**

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2, Forestville, Conn.

TEAT TRIEVE SAVES TEATS From Going Blind

For SPIDER, INFECTIOUS SCABS, INJURED or FROSTED TEATS.

Apply Teat Trieve when cows' teats have orifices scabbed over or hail-like swellings near the end. Quickly relieves soreness. Restores teat to normal before udder becomes affected. Prevents contagion. Invaluable to all Dairymen. Kept on hand, saves time and losses. Price $1.00, postage prepaid. C.O.D. Satisfaction guaranteed.

HICKOK PRODUCTS CO. • AWATONNA, MINN.

Old Money Wanted

Inspect every coin you get. Many worth big premiums. Will pay $50 for 1913 nickle with Liberty head (not Buffalo); $50 for 1894 dime S. mint. Coins as late as 1916 are worth cash premiums. We pay cash premiums for all rare coins. Get posted so you will know a valuable coin when you see one. Send 4c for large coin circular. May mean big profit to you.

NUMISMATIC BANK, Dept. 576. Fort Worth, Tex.

Keep Your Cows From ABORTING

Don't keep on losing calves and letting valuable cows become barren. End Contagious Abortion by using ABORNO, the pioneer, guaranteed remedy. Easily administered treatment kills abortion germs quickly without harming cattle. Write for Free Book, with letters from users.

ABORNO LABORATORY
37 Jeff St. Lancaster, Wis.

Read What These Pennsylvania Dairymen Say about the De Laval Milker

"I am milking 12 cows and expect to milk 25 as the winter comes on. The De Laval Milker gives great satisfaction in every way. The heifers with their first calves take it very nicely."
M. H. Thompson,
Clarks Summit, Pa.

"The De Laval Milker I bought from you 2 years and 6 months ago has done very satisfactory work. It is an easy thing to wash and keep clean; a great help to the dairy business. I would not think of being or doing without it. It has never caused any udder trouble in the least and the cows like it far better than hand milking. Most any help of 12 years or over can operate the milker without trouble, and it is a pleasure to use it."
Samuel B. Condo,
Loganton, Pa.

"I think the De Laval Milker is one of the most profitable machines I have installed on the farm, also eliminating much very unpleasant work. As to the product, I think it is more sanitary, giving a better and cleaner quality of milk than by hand. As to the cows, I am sure they like it better, and I find that the cows that have gone through a full period of lactation have given more milk than when milked by hand."
C. M. Brubaker,
Lancaster, Pa.

"I have used the De Laval Milker for nearly 3 years and the De Laval Separator for 5 years, and am very well satisfied with both and don't think they could be duplicated for more money."
B. C. Bowers,
Wells Creek, Pa.

"I am very grateful for the chance to tell you how much we like our De Laval Milker. We have milked from 25 to 40 cows for over 3 years with two units, and never mised but one milking, which was caused by engine trouble. Our 10-year-old girl and her grandfather of 78 have milked 25 cows in an hour and a quarter. Our upkeep has been very little."
Mort Williams,
Canton, Pa.

"The De Laval Milker I bought 3 years ago is in good condition. I am milking 17 cows. My boy, 10 years old, can do the milking, outside of starting the engine. After 3 years service I now know the De Laval is worth every cent I paid for it. It takes me just 12 minutes to wash the milker each day. I have never had any trouble in keeping it clean."
C. J. Landers,
Cambridge Springs, Pa.

"The De Laval Milker has given the best of service and has not missed a milking since May 1920, and we have not had one case of udder or any other bag trouble whatever; not even as much as a caked quarter since we have used it. We are also using a De Laval Separator and it is giving the best of service."
T. J. Messinger,
Columbus, Pa.

"I could not get along without the De Laval Milker under present conditions. Have used it for more than 2 years with perfect satisfaction. It makes milking easy; does it quickly and thoroughly. It is a time and money saver. Anyone can operate it. It is easy to keep clean. Have cleaner milk than by hand milking, and more of it."
John A. Williams,
Little Meadows, Pa.

De Laval Milker Prices Reduced

1925 Reduced Prices on De Laval Milkers now in effect.

Sold on such easy terms (10 to 25% down the balance in 12 to 15 months) that they pay for themselves.

"Our De Laval Milker is working fine. On Feburary 1st it will be 3 years since installed, and we have never missed a milking on account of the machine. It is a labor saver and I am perfectly satisfied with it."
Menno J. Yoder,
Meyersdale, Pa.

"I have used the De Laval Milker for nearly 5 years. It has given me complete satisfaction and has never once failed me. I can say the De Laval Way is absolutely 'The Better Way of Milking.' It also is the 'Milker that pleases the cow,' and no dairyman can afford to be without it."
Simon N. Hertzler,
Mount Joy, Pa.

"My De Laval Milker is doing fine work because there is nothing to get out of order about the machine. This milker is very easy on the cows and they like it better than hand milking."
C. J. Weaner,
Gettysburg, Pa.

"My De Laval Milker has been doing splendidly for me. It has been no trouble at all beyond wear and tear, and even that has been small considering that it is now doing its fourth year of service. It certainly has made itself a trustworthy friend. I can heartily recommend it to any prospective buyer who is looking for the best machine."
E. B. Sorrick,
Williamsburg, Pa.

"I have had very good success with the De Laval Milker. I bought the machine about 3 years ago. It had been used one year prior to the time I bought it. It still works fine."
Francis Myers,
New Britain, Pa.

"The De Laval Milker is giving perfectly satisfactory service. Everything is in No. 1 condition. It does the milking fine. There have been a great many people here to see it work and they think it is great. We can say there is none better than the De Laval Milker."
Mr. C. L. Barnhart,
Chambersburg, Pa.

"I surely couldn't praise the De Laval Milker too much, as mine has never yet given me a bit of trouble. I have had it 3 years and have never lost a milking with it yet."
Richard Barrett,
Wyalusing, Pa.

"I have been running a dairy for over 20 years and never had a milker until I bought yours. Since my De Laval was installed I have often milked 20 cows in one hour by myself with 2 units, cows averaging 4 gallons a day. I would sooner trust the De Laval than any hand milker I ever had. It produces cleaner milk, cows are more contented, and have never had sore teats as long as I have had the De Laval. I would not run a dairy without a De Laval."
Wm. F. Karte,
Midway, Pa.

"My De Laval Milker is satisfactory in every respect. I do not know how I would do without it. I have 18 cows and if I did not have the milker I could not tend to more than half."
Bruce F. Miller,
Friedens, Pa.

"We are very much pleased with our De Laval Milker. We have 15 cows and outside of engine trouble, which is no fault of ours, the milker has been in perfect condition to milk these cows twice a day since we owned it."
Ira J. Post,
Ivyland, Pa.

"I am entirely satisfied with the De Laval Milker, and couldn't think of using any other kind of machine. I have never had any trouble with it and have used it nearly two years."
Roland King,
Westfield, Pa.

"I have been using the De Laval milker for two years the 20th of this month and it has given me complete satisfaction. In these two years I have not missed a single milking. I think that is some good service, and it is also a labor saver. We certainly would not like to do without the De Laval Milker."
L. W. Gemberling,
Selinsgrove, Pa.

Trade in Your Old Cream Separator for a New De Laval

De Laval Agents are now making liberal allowances on old centrifugal cream separators, of any age or make, as partial payment on new improved De Lavals—the best cream separator ever made.

Send for Complete Information

The De Laval Separator Co., Dept. 9817
New York, 165 B'way Chicago, 29 E. Madison St.
San Francisco, 61 Beale St.

Send Catalog checked—Separator Milker

Name .....

Town .....

State..... R.F.D.....

No. Cows.....

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER... ...IATION, Inc.

VOLUME V WEST CHESTER, PA., AN... ...1, 1925 NUMBER 10

PENNSYLVANIA STATE FARM PRODUCTS SHOW

ANNUAL EXHIBITS AND MEETINGS

The State Farm Products Show, held in Harrisburg, Pa., January 19th, 23rd, eclipsed all previous exhibits. Not only were the various displays of a more elaborate nature, but added features played a material part in making the show the most interesting of any previous one.

The exhibit of electrical farm appliances on the J. Q. A. Rutherford farm, a few miles east of Harrisburg was an added feature this year and showed the wide adaptability of electricity on the farm, both as a convenience in the household and as a power medium for the operation of farm machinery and equipment.

The various displays however were not the only feature at the Pennsylvania Farm Products Show. Twenty-seven different farm organizations held meetings during the show week. In addition to this were the meetings of the Pennsylvania General Assembly and the numerous conferences with members of the Senate and House of Representatives in connection with legislative programs to be developed during the legislative session.

The various exhibits of the Farm Products Show were held in the Emerson-Brantingham Building, three floors of which were filled with exhibits, the Moto Mark Building, which housed the swine show, the Rendezvous Ball Room which housed the corn and wool show and the exhibits and demonstrations of the Vocational Schools, the Huber building with a dairy cattle exhibit and the electrical farm equipment display on the Rutherford Farm.

Throughout the period of the show, these various buildings were filled with visitors, viewing the various products and demonstrations.

JOINT MEETING

The formal opening of agricultural week, was held on Monday evening, January 19th, with a joint meeting of all the agricultural associations, at the Chestnut Street Auditorium, at which upwards of 2,000 attended.

Hon. F. P. Willits, State Secretary of Agriculture made the welcoming address and conducted the meeting.

Hon. Gifford Pinchot, Governor of the Commonwealth of Pennsylvania, made a brief address. He pledged the administration's help to the farmers. He praised the work of the state vocational schools and urged the boys and girls of the vocational schools present to remain on the farms. He reiterated the policies of the administration on the "dry" program and stated that they would remain "dry" as long as he remained in office. Unity of action, co-operation, he said, was the watchword of the farmers success.

Morris L. Cooke, a member of the Pennsylvania Giant Power Survey Board, made an interesting address on the subject of electricity on the farm.

Pennsylvania farmers, he said, must be provided with electricity and encouraged to use it to eliminate drudgery in the farm house and for power purposes.

"The Pennsylvania farmer is without electricity now, first, because the electrical service companies have been absorbed in providing the large volume of current demanded by industry, and second, because rural rates have invariably been such as are charged in the nearby cities, with something added. There is no logical relationship between city and rural rates.

"In other states and in foreign countries it has been demonstrated that with favorable rates the farmer is a power user, where the city householder uses current principally for lighting.

"Agriculture is our greatest power-consuming activity, and to capture this new class of business the electrical industry must plan just as carefully and

(Continued on page 8)

THE ELECTRIC FARM

A FEATURE OF THE PENNSYLVANIA STATE FARM PRODUCTS SHOW

Probably no other one thing at the recent Pennsylvania State Farm Products' Show, held recently in Harrisburg, was more outstanding in its novelty and method of demonstration than was the exhibit on the J. Q. A. Rutherford farm, located on the Lincoln Highway, some three miles east of Harrisburg. It had great interest for its many visitors and showed the value of electricity on the farm.

Demonstration of Electrically Driven Farm Equipment at the Rutherford Farm, Near Harrisburg Pennsylvania

Here were shown nearly 100 electrical appliances, ranging from an electric shaving device to power equipment requiring upwards of 10 horse power.

This great exhibit was not made with the view point that every farm in the State of Pennsylvania should be so equipped, but that the full scope in the value of electric power on the farm might be visualized for all who attended the display.

The idea of demonstrating to the public and especially to the farmer the possibilities of electrifying the farm in this way is rapidly spreading to other states.

Since the Rutherford farm has been electrically equipped, things move on a different schedule.

In spite of the dark, cloudy, atmosphere, the chickens are up at four oclock in the morning and are busy eating and scratching. This is the result of having an electric alarm clock which turns on the lights in the poultry house at that hour. Twenty-five or more farm machines such as a thresher, potato grader, hay baler, concrete mixer, food grinder, and fodder shredder are operated with the aid of an electric chore motor which can be easily taken from one machine to another.

The cow stable attracts much attention with its equipment of grooming, clipping, and other machines in addition to complete lighting of the entire basement of the barn.

The cows are milked with the aid of electricity.

The milk is cooled, bottles and utensils are washed by electrically driven apparatus.

Even wood is being split by means of a mechanical wood splitter, electrically driven.

The laundry in the farm home, with its electric washer, mangle iron, and other appliances, is an interesting illustration of how drudgery of washing day can be eliminated from the farm. In the house, the kitchen, dining room, living room, bedroom and bathroom are all completely equipped with electrical appliances and show in an impressive way the great evolution that has taken place in recent years especially since the development of electrical appliances.

Throughout this big exhibit but one appliance of a kind was used for demonstration purposes. In most cases they were donated for the purpose of making the exhibit. The idea being to give a demonstration of the possibility of the use of electric power. The committee in charge wishes it made clear that the particular make of a given appliance which happened to be used on the exhibit. is not the only one that can be recommended to a possible buyer of such equipment. The selected equipment is merely representative, there being many other lines equally satisfactory for farm use.

A trip through the Electric Farm gave the visitor the opportunity of seeing over 110 electric appliances, properly placed in the house and about the farm buildings.

The following outlined list of machinery and equipment, with its consumption in "watts" is given.

The committee in charge of the preparation of the electric farm was as follows: Chairman, F. P. Willits, State Secretary of Agriculture; Judson C.

(Continued on page 13)

SURPLUS COSTS INDUSTRY MILLIONS

Frank O. Lowden Discusses Co-operative Marketing at Washington

"A hundred million pounds of surplus butter will supply the American people for about two weeks and a half," said Frank O. Lowden, former governor of Illinois, addressing the annual convention of the National Council of Farmers' Co-operative Marketing Associations at Washington on January 5th. "Is the dairy farmer producing with such reckless abandon, by contributing to this surplus, that he should suffer a loss in price of 25 per cent for the full year's product?"

He points to the fact that a similar condition exists in connection with other products of the American farmer. In years of greater production the farmer gets a less total return than in years of less production.

"Recently the department of agriculture issued a report upon the value of the principal farm crops of the country for the last year. It showed an increase of something like $50,000,000 as compared with the year before. This, of course, was a welcome addition to the income of the farmers of the country. The report, however, disclosed some perplexing facts.

"The corn crop was about 20 per cent smaller than the crop of the preceding year. The total value, however, exceeded that of the preceding crop by almost $200,000,000. And everyone knows that the quality of this year's crop was far below the quality of the crop of the preceding year. And yet, under a marketing system which it is claimed is one of the most noteworthy achievements of this commercial age, the smaller crop of inferior corn was worth more in the market than the larger and superior crop of the year before.

Big Milk Production Caused Butter Surplus

"It was a summer disastrous for corn, but very helpful to the growth of grasses in meadows and pastures. There was, therefore, a considerable increase in the production of milk, with the result that something like 100,000,000 pounds more of butter was produced in 1924 than in the year before.

"This is only about 5 per cent of the total annual production of butter in the United States. It created a surplus, however, of about 50,000,000 pounds, as compared with the surplus of the year before, on account of the increased domestic consumption. This relatively small increase, due to the same wet days and cold nights which so seriously injured the corn crop, resulted in a decrease of the price of butter of from 20 to 25 per cent. And the price of butter, let it be remembered, largely controls the price of all other dairy products. Since the total value of dairy products upon the farm in 1923 was in the neighborhood of $2,500,000,000 this decrease in market price resulted in an estimated loss to the dairy farmers of America of $500,000,000.

1923 Corn Crop Sold at Loss

"It is safe to say that the larger part of the bumper corn crop of 1923 was sold at a price which did not cover the cost of production. If corn growers had been organized and found that the market would not receive their corn at what it cost them to produce it, they would not have dumped the larger part of the corn crop upon the market in a few brief months. They would have sold sparingly. They would have stored the remainder, knowing full well that seasons of bountiful production are always followed by seasons of low production, and that at no distant day they would receive a fair price for their corn. As it was, only a few of the corn farmers were able to hold their corn for the higher prices, which they had rightly anticipated and which were later received.

"In other words, the corn farmers, if organized, would have adjusted the supply to the actual demand.

Dairy Depression Avoidable

"And so if the dairy farmers had had some way by which they could have taken last year the incubus of 50,000,000 or at the outside 100,000,000 pounds of butter off the market, it is almost certain in the opinion of experts that the great surplus in the industry would not have occurred.

"If, in other words, this added 50,000,000 or, if you please, 100,000,000 pounds had been purchased at a cost say of $50,000,000, carried out to sea, and deposited in the locker of Davy Jones, the dairy farmers of America would have received, as a return upon their large investment and their labors, something like $500,000,000 more than they actually did receive.

What Is a Surplus?

"Now, what is a surplus? A hundred million pounds of surplus butter of which I spoke a moment ago, will supply the American people for about two weeks and a half. Is the dairy farmer producing with such reckless abandon, by contributing to this surplus, that he should suffer a loss in price of 25 per cent for the full year's product?

"The United States is the greatest food-producing nation in the world, and yet all our accumulations of food are but a few months in advance of want and famine. I have been studying this question of surplus. I have come to the conclusion that it exists mainly in the minds of those whose interest it is to depress prices.

"I find that the cotton crop for the last year was slightly in excess of 13,000,000 bales. The year before it was a little more than 10,000,000 bales. And yet, the 10,000,000 bales were worth, according to the report, about $85,000,000 more than the 13,000,000 bales. And no one has suggested that the world has a surplus of cotton. Indeed, there has been grave apprehension among cotton spinners everywhere as to the future adequate supply of that commodity.

Production Consumers' Problem

"Our agricultural colleges and our departments of agriculture have constantly urged larger production. They have assured and naturally, I think, that the more wheat and corn we raise the fewer hungry mouths there will be and that the more cotton we produce the fewer people will be obliged to go naked or but half clothed. For whatever we may say as to a surplus, we know that there really has never been too much food or too much of clothing for a needy world.

"And of course, it follows that the larger the production per unit, the cheaper will the product be. But when large production is used to drive prices down so as to make large production less profitable than small production, large production will not continue, and

(Continued on page 10)

NEW JERSEY BREEDERS SHOW GREAT INTEREST IN THEIR PROBLEMS

By E. J. PERRY

Three hundred breeders and dairymen of New Jersey attended the breed association meetings held at Trenton, on January 15, in connection with the annual Farmers' Week. In the morning the dairymen met jointly with the alfalfa association to listen to a discussion on the most approved methods of growing this important dairy crop under New Jersey conditions. With the aid of lantern slides and charts many important points in alfalfa production were brought to the attention of the growers.

Following a joint luncheon at the Stacy-Trent Hotel, the Guernsey, Holstein, Jersey and Ayrshire breeders held their respective annual meetings to elect officers and adopt programs of work for 1925. The Guernsey Association elected the following officers: President, R. L. Benson; Vice-President, R. V. Lindabury; Secretary-Treasurer, W. T. White, of Princeton. Executive Committee: Mrs. F. K. Stevens, Jos. L. Hope, Jas. E. Russell, C. D. Cleveland, E. T. Gill, Elmer Niece and Albert Forsythe.

As in past years, 12 silver cups in the form of miniature Guernsey milk cans were awarded to the herdsmen who made the best records in the respective classes for 1924. The breeders present voted to incorporate under the name, New Jersey Guernsey Breeders' Association, Inc. Its membership now numbers 250. Fifty of these are junior members in calf clubs.

In the afternoon Mr. D. L. James, of the U. S. Department of Agriculture, spoke on "Co-operative Bottling and Distributing Plans," and Mr. R. I. Benson read a paper entitled, "Contagious Abortion and Its Treatment." Mr. William Nulton, Jr., the field secretary for New Jersey, read his annual report, which reflected a growing interest in well-bred Guernseys for 1924. Mr. Lyman Horner, a member, carried off first honors in the milk contest with his sample which scored 98.5. There were 12 other Guernsey samples that averaged 94.8.

The Holstein Association elected the following officers: President, G. D. Brill; Vice-President, H. A. Davidson; Secretary, P. P. Van Nuys, of Belle Mead; Treasurer, T. H. Mettler. Executive Committee: Samuel Ridgway, J. M. Nevius, Henry Schmidt, A. S. Danks, M. H. Keeney, A. R. Jackson, Frank Vandruff and John Tine. Three speakers addressed the meeting. Professor H. H. Wing spoke on "Making Holsteins Pay;" E. R. Eastman discussed "The Future Outlook;" and A. W. Carpenter spoke on "Business Methods in Dairying." At the business session it was voted to suspend field work in New Jersey for the present. Mr. Fred Koenig, Director of the Extension Service of the National Holstein Association, explained the method by which New Jersey breeders could avail themselves of the assistance from the National Association in carrying out an educational program. A feeling of optimism prevailed among the breeders regarding the present trend of the industry in the East and the present demand and prices for good Holsteins.

The Jersey breeders of New Jersey had as their guest, Mr. W. C. Randolph of the American Jersey Cattle Club, discussed the status of the breed in New Jersey and the best means of meeting the needs of the farmers of the state who want Jerseys. The officers for 1924 were re-elected. They are: President, Henry Young; Vice President, P. H. B. Frelinghuysen; Secretary-Treasurer, J. M. Belcher of Far Hills. Executive committee: W. R. Spann, Chas. Hires, Fred Huyler, C. L. Hamilton, Chas. Descher and Reginald Halliday.

At the annual meeting of the New Jersey Ayrshire Breeders' Association the following officers were elected: President, George A. Hill; Vice President, W. P. Probasco; Secretary-Treasurer, W. H. Eberling, Dover.

Mr. J. G. Watson, ex-Secretary of the Ayrshire Breeders' Association of America and now Associate-Editor of the New England Homestead, spoke to the Ayrshire men on the subject "The Future of the Ayrshire."

One hundred and twenty breeders and dairymen sat down together at the annual Get-together banquet at Hildebrecht's in the evening. E. J. Perry, Chairman of the banquet committee, introduced as toastmaster, Professor A. M. Hulbert, Assistant Director of Agricultural Extension. Throughout the evening good natured rivalry manifested itself in the sallies of the different speakers when extolling the virtues of their favorite breed. The speakers representing the several breeds were: J. G. Watson, Ayrshire; W. C. Randolph, Jersey; George Stone, Guernsey; and Allen Crissey, Holstein. Other speakers who discussed the problems of the industry as a whole were H. J. Baker, Director of Agricultural Extension; E. R. Eastman, Editor of American Agriculturist; and A. W. Carpenter, Sales Manager of the Larrowe Milling Company. The various talks dealt with the factors in economical production, the necessity for high quality products, the importance of breed associations, the wider use of milk, co-operative marketing and advertising.

MARKETING BUREAU TO HELP HOUSEWIVES

Marketing hints for housewives is the new feature being presented weekly by the Pennsylvania Bureau of Markets co-operating with the United States Bureau of Agricultural Economics, through Station WIP in Philadelphia. Talks are given every Tuesday afternoon from 4.20 to 4.30.

The object is to acquaint the housewife with market conditions that are of interest and importance to her. There are many times when the wholesale market is overstocked with certain commodities, and a knowledge of this helps her to buy economically and also aids in the general distribution of agricultural products.

As new or unusual commodities appear on the market, an effort will be made to introduce them by means of the radio. This is one of the first efforts to bring market information direct to the consumer. The talks will not contain prices on account of the great variation in stores and neighborhoods.

As each cow's milking is weighed a glance up the columns will tell how she compares with the rest.

One can't be too cautious around the barn with lighted lanterns.

FACTORS ESSENTIAL IN THE MARKETING OF MILK PRODUCTS BY THE CO-OPERATIVE PLAN

By H. G. NIESLEY

Marketing of milk by the cooperative plan calls to mind two rather distinct types of organization.

One of these is a more or less centralized type which exerts bargaining power for its members and adjusts needs and difficulties. In addition, considerable educational work is done from both the consumer or demand side as well as from the producer or supply side. This type of organization, of which there are several in Pennsylvania, assists in marketing milk without possessing ownership of the product. Loyalty of members and organization result in the selection of leaders possessing power to speak for the industry.

The other general type of cooperative marketing is that surrounding a small town or city, or representing a group processing milk products. In this type, the product is owned by the producers along most of the road from producer to consumer. This plan calls for a very direct interest by the producer in the marketing of his product; creating and maintaining absolute confidence in the consumer by the higher quality of product handled is essential for the success of such cooperative effort. It must practice the principle of efficient and unlimited service. The producers must understand business principles underlying successful merchandizing if successful cooperative marketing shall be attained. A product that is clean, sweet, pure, and delivered in a uniform and attractive package in proper and uniform amounts at a satisfactory price means much for the success of such co-operative endeavor. In this type of organization, it is necessary that the leaders and directors be sympathetic to the farmers' problems. They must be keen analysts of economic conditions and possess unlimited knowledge of sound business policies.

This type of organization further calls for a manager in whom sufficient confidence should be placed by the directors to give him full charge of the business. The directors, however, should always determine the general policies.

The success of this type of organization is determined largely by the membership being clustered around a common center and includes those having a common interest and a thorough cooperative and community spirit. Milk naturally lends itself more readily to cooperative marketing by the pooling plan than most any other farm product and therefore offers greatest possibilities for success.

Reducing the cost of distribution by more efficient methods and increasing the volume of business to the highest point of efficiency are two very essential phases of this type of cooperative marketing. If these factors be carried out, both the consumer and producer will benefit. The safe-guarding of the product from the time it leaves the farm until it passes safely into the hands of the final consumer is the most essential factor to be born in mind by these cooperative enterprises.

Cooperative marketing of this type as well as the former type mentioned must either bring about an improvement in the quality of product handled or an improvement of the service rendered if it is to succeed. The higher price which many producers expect as a result of cooperation may be attained temporarily without an improvement of the product but if long time results are expected the product must be improved. An improvement of the article produced or processed will always result in a higher quality and will demand a higher price.

The mere fact that producers join themselves together will not necessarily, through a long period of time, result in a higher price. The combined effort must result in raising the grade and standard of the article produced or improving the service necessary to make more and better satisfied consumers. The former type of organization mentioned, namely, the centralized calls for just as close cooperation, and demands that farmers conform to the wishes of the leaders just as much as in the latter type.

As the consumers continue to demand a particular form, type, or quality product, the producer must adjust his production methods to satisfy these demands. When regulations seem to work a hardship on the producer, he must be constantly mindful of the fact that those whom he has selected to lead his organization are probably better able than himself to sense the real needs of the trade.

Finally, there are bright hopes for a continued improvement of cooperative marketing problems. Only in-so-far as it establishes sound business principles built on intelligent membership can it hope to result in the two outstanding needs: namely, improvement of the product and bettering the service.

MARYLAND AGRICULTURAL SOCIETY, CAMBRIDGE, MD., MEETINGS

The dairy meetings held under the auspices of the various societies, in Cambridge. Dorchester county, Maryland, took place January 7, 8 and 9.

The various sessions were well attended and aroused enthusiasm throughout the 'Eastern Shore."

These meetings were part of the program of "Maryland Week," under the direct auspices of the Maryland Agricultural Society and the Maryland Farm Bureau Federation .

The attendance—some 300 in number—was composed of representative farmers and dairymen from all over the State. The majority of the dairymen present being members of the Inter-State Milk Producers' Association, since the meeting was held on the "Eastern Shore." Membership in the Maryland State Dairymen's Association and from the Maryland Milk Producers' Association were also in attendance.

R. Smith Snader, president of the Maryland State Dairymen's Association, presided.

Addresses were made by H. D. Allebach, president Inter-State Milk Producers' Association, who spoke on the subject, "Organization Work." R. W. Balderston, secretary, Philadephia Inter-State Dairy Council, "Possibilities and Limitations of Co-operative Marketing of Milk." I. W. Heaps, secretary-treasurer Maryland State Dairymen's Association, who spoke on "Marketing Milk." J. A. Conover, Dairy Extension Specialist, Maryland State University, spoke on the "Future of Dairying in Maryland." In the course of his very interesting address, Mr. Conover presented interesting figures showing the possibilities for improving the dairy practices of the Eastern Shore of Maryland.

He stated that it was estimated that the average production of a cow on the Eastern Shore is 2,000 pounds. At the prevailing price of milk for the past year, this gave a total average gross return per cow to Eastern Shore farmers of $47.42 for the year.

To show how the farmers could increase their profits per cow, Mr. Conover stated that, as compared with the above figures, the average production per cow in the four highest producing counties in Maryland last year was 3,845 pounds. At the prevailing price for milk, this gave a gross return per cow to the farmer of $88.67.

But in Maryland there are many cows doing much better than this, Mr. Conover says. The average production of the cows in the Maryland Cow Testing Association last year was 6,050 pounds. If this had been sold at the same price as the Eastern Shore milk, it would return to each farmer $136.94 for each cow he owns.

Mr. Conover went on to state that not only was the total return of the cows in the Cow Testing Association to the farmers almost three times that of the average farmers of the Eastern Shore, but that the cost of producing this milk was very much lower than that of the lower producing cows. The feed costs were, of course, somewhat greater. The better grade cow took up practically no more room and the care of the cow, except for a little additional time and milking, was no greater. The cost of roughage in the feed in both cases was practically the same. The increased production, in many cases, simply being gotten through the addition of a well balanced grain ration. But Mr. Conover pointed out a more emphatic factor in the Eastern Shore of Maryland than that of proper feeding. He stated that undoubtedly many of the cows in the Eastern Shore were of such poor breeding that no amount of care and feeding would make them economical milk producers and undoubtedly the very best thing that an Eastern Shore farmer could do at the present time was to know what his cows were giving and to eliminate every cow which was not returning a satisfactory net profit.

Other meetings held during the week included those of the Maryland State Horticultural Society, Maryland Crop Improvement Association, Maryland State Dairymen's Association, Maryland State Beekeepers' Association, Maryland State Vegetable Growers' Association, Maryland State Sheep Growers' Association, The Agricultural Corporations of Maryland, Maryland Tobacco Growers' Association, Atlantic Coast Poultry Producers' Association, Maryland Swine Growers' Association.

On Thursday evening, January 8th, a banquet was held in the local armory. The principal speakers were, Hon. Huston Thompson, chairman Federal Trade Commission and Frank M. Payne, vice-president Atlantic Coast Poultry Producers' Association.

CORN SHOW AND MILK MEETING AT LEWES, Del.

The farmers' meeting and State Corn Show, held at the Lewes High School, Lewes, Delaware, on Wednesday evening, January 7th, was attended by a large number of farmers and their families.

While the majority of those present came from the territory near the Nassau Shipping Station, a number came from other sections of the State.

Mr. Cook, State Boys' Club leader, awarded the prizes for corn and other exhibits.

Following these awards, addresses were made by H. D. Allebach, president of the Inter-State Milk Producers' Association; R. W. Balderston, secretary, the Philadelphia Inter-State Dairy Council, and Dr. W. J. Morse, U. S. Department of Agriculture.

As an entertainment the Dairy Council's film "Shadows" was shown.

The question of holding a local dairy feeding school in the near future was presented by R. W. Balderston and drew out a considerable expression of opinion.

Plans for holding such a school will be completed at an early date by County Agent, H. C. Vaugh, in co-operation with C. I. Cohee, director of the Quality Control Department of the Inter-State Dairy Council.

Mr. Allebach, in his address, complimented the local dairymen on producing very high quality milk in their first year of Grade A Milk production. He explained that the bacteria counts at the Nassau Shipping Station averaged remarkably low, even during the hot weather of last summer.

INTERSTATE MILK PRODUCERS REVIEW

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August A. Miller, Editor

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Editorial

The ninth annual Farm Products Show and its attendant educational meetings of agricultural organizations in Pennsylvania was held in Harrisburg during the past month.

The value and importance of this great educational project is growing each year by leaps and bounds, not only in the visual exhibits and demonstrations of farm products but in the scope of its educational value.

Some 28 different farm organizations held meetings during the week, some covering sessions running over two full days.

Over 100,000 square feet of floor space was given to various exhibits, scattered over three or four buildings. Inadequate facilities at the best. Of necessity widely scattered and inadequate for the purpose.

If the Farm Products Show is to continue as a feature in Harrisburg—year after year—it is time some adequate means be taken to house this great project. Many adverse expressions from exhibitors have been heard and the continuance as exhibitors at these shows is doubtful unless adequate provisions for display is offered.

The project of a State Fair Ground, at or near Harrisburg would no doubt solve this problem—but in the customary legislative way—it drags and drifts until we fear that the show will have drifted from Harrisbug to some other place, with better facilities available for both show purposes and meetings.

It is time somebody sat up and took notice.

There is no question but that cooperation, efficient and sanely carried out, will be of the greatest possible benefit to the cooperators, irrespective of the field of endeavor.

Just as soon, however, as any branch of co-operation conducts a campaign of falsehood, innuendo or inference as a part of its propaganda, just that soon begins its failure as a cooperator and of value to the cooperating interest.

Field operatives must confine their efforts strictly along truthful lines or the result must be inevitable—failure—no cooperative can be successful in using false propaganda to accomplish its ends.

Frequently such false propaganda may carry on for a long period but the time will come and, in instances, has come when these unfair practices come to light.

Organizations, including the Inter-State Milk Producers' Association, are responsible for the statements of their employees and this association has made every effort to employ only fair minded men. When found guilty of unfair practices such men have and should be immediately dropped from its employ.

The Inter-State Milk Producers' Association has endeavored to play the game fairly, its cards are placed on the the table, face up, and it has been successful. Its employees are given to understand that no unfair practices will be permitted and that any infraction of this rule means dismissal.

This policy must be adopted by other cooperating organizations if they would achieve permanent success.

WESTERN MILK FOR EAST

With his glass tank the Western farmer may soon become the milkman of the East. By fast freight New York can get milk in tanks from California in sixty hours. . . .

Tanking milk to the consuming centers in the East will have many good results. It should lower as well as stabilize the price of milk in the East and in the great cities Tanking Milk will develop the West. It will extend the dairy area. That means extension of diversified farming, land rebuilding, and a general stabilization of agricultural conditions. (*Reprinted from the Cecil Whig, Md., January 17th.*)

The situation outlined in the above story may be within the bounds of possibility. It has been considered for some time by the officers of the Inter-State Milk Producers' Association.

To combat the influx of milk from distant territory, the membership itself, has embarked on a clean-up program, in which the distributors are co-operating to produce a grade of milk that cannot be equalled by milk from long distant points.

The maintainance of a high grade product, one that the consumer really likes, will go a long way toward the maintainance of a market, notwithstanding the fact that milk of lower quality may be offered in this market as a dumping ground from distant producing districts.

There is but one thing to be considered—produce milk of the highest grade and your market will be assured. (*Editor.*)

QUALITY CONTROL DEPT. REPORT

February 1st, 1925.

No. Temp. Permits Issued..15,633
No. Perm. Permits Issued....3,266
Approximate Number Inspections Made to Date..16,225

QUALITY CONTROL DEPARTMENT CHANGES IN PERSONNEL

W. Horace Harper, who has served as Assistant Director of the Quality Control Department of the Philadelphia Inter-State Dairy Council, for several years, has accepted the position of secretary manager of the Baltimore District Dairy Council, with headquarters in Baltimore, Maryland.

Mr. Harper, is well qualified for this new work, as he has had a wide experience along similar lines.

Dr. E. G. Lechner, will succeed Mr. Harper as Assistant Director of the Quality Control Department. He has been acting as a field man in this department for about a year. Dr. Lechner is a graduate of the University of Pennsylvania Veternary School, Class of 1918. He practiced his profession for five years in Montgomery county.

Dr. E. G. Lechner

Dr. Lechner's training and many years of experience as a veterinarian, will be of particular value in the Quality Control work of cleaning up the milk supply of the Philadelphia Milk Shed.

Harold S. Smith, who graduated from the Iowa State College in 1924 and who since that time has been employed by the U. S. Department of Agriculture in special field work in the state of Iowa, has been engaged as one of the field representatives of the Quality Control Department. Mr. Smith's lifetime experience on a dairy farm in Iowa and his college training qualifies him particularly well for the work in this territory.

Chester A. Bishop, a graduate of the Massachusetts Agricultural College in the Class of 1915, has also been engaged as a Quality Control worker. Mr. Bishop was raised on a farm and has had a wide experience in dairying, having operated a farm of his own in Vermont and more recently been engaged in the management of a large dairy in Connecticut. It is felt that his training and experience will prove very valuable in this line of work.

Miss Martha Stedman Smith, who has been connected with the Nutrition Department of the Philadelphia Inter-State Dairy Council for two and a half years has resigned to accept an appointment as Nutrition Director of the new Baltimore Dairy Council, of which Mr. W. Horace Harper, is the new manager. Miss Smith's work will be similar to that which she did for the Philadelphia Inter-State Dairy Council in Wilmington, Altoona, Reading and other cities, and her many friends in Philadelphia wish her every success in her new position.

JERSEY BREEDERS FORM STATE ORGANIZATION

At a meeting attended by Jersey Breeders from eleven Pennsylvania Counties at Harrisburg, January 20, the Pennsylvania Jersey Cattle Club was organized. This is the first statewide organization of Jersey Breeders in Pennsylvania. Warren C. F. Randolph, Field Man for the American Jersey Cattle Club was present to assist the Keystone Breeders in their organization endeavors.

Officers elected were as follows: President, W. F. Shrum, Jeanette; 1st Vice President, Harry Hayward, Devon; 2nd Vice President, Utley Wedge, Paoli; 3rd Vice President, M. A. Taylor, Grover; Secretary, Treasurer and Publicity Agent, C. A. Fox, Pocopson; Directors Luke B. Carter, Titusville; C. Robert Mays, Reading; H. G. Twaddell, Westtown; J. C. McCandless, Euclid, Pa.

CHESTER COUNTY JERSEY BREED CLUB FORMED

A new organization of Jersey Cow Breeders has recently been organized in Chester county.

At a meeting, held at West Chester, recently, Warren C. F. Randolph, of the American Jersey Cattle Clubs, addressed the new organization.

The newly elected officers are: President, Harry Hayward, Devon; Vice-President, Horace Twaddell, Westtown; Secretary-Treasurer, Crawford Twaddell, Westtown, and C. Albert Fox, Pocopson, Publicity Director.

Various committees, including a calf club membership committee, were appointed.

PENNSYLVANIA STATE FARM PRODUCTS SHOW

AWARDS FOR DAIRY PRODUCTS

MILK

Class I—Raw Market Milk (from tuberculosis free cows).

1st. H. F. Dague, Whitford, Chester county, 98.45.
2nd. Thos. Hadfield, Downingtown, Chester county, 98.40.
3rd. Longwood Farm, Kennett Square, Chester county, 98.30.
4th. Thomas and Howell, Whitford, Chester county, 98.25.
5th. Webster and Griffith, Edensburg, Cambria county, 98.10.

Class II. Raw Market Milk

1st. Mayer and Confer, Howard, Centre county, 98.7.
2nd. Henry Sheets, Churchville, Bucks county, 98.2.
3rd. Charles C. Willis, Newtown, Bucks county, 98.
4th. Kennedy Bros., Oxford, Chester, county, 97.9.
5th. Mary Sharples, West Chester, Chester county, 97.8.

Class III. Certified Milk

1st. Edgewood Dairies, Woodside, Bucks county, 95.9.
2nd. Pennsylvania State College, State College, Centre, 94.4.

Class IV. Pasteurized Milk

1st. Supplee, Wills, Jones and Company, Philadelphia, Philadelphia county, 99.
2nd. Abbots Alderney Dairies, Philadelphia, Philadelphia county, 97.
3rd. Greenwalt Dairies, Carlisle, Cumberland county 88.9.
4th. Greenville Dairy Company, Greenville, Mercer county, 86.8.

Farm Butter

1st. Ralph Hisler, Berwick, Pa.
2nd. C. Allen May, Dover, Pa.
3rd. John E. May, Dover, Pa.
4th. J. Bartner, Windsor, Pa.

Creamery Butter

1st. Greenville Dairy Company, Greenville, Pa.
2nd. Silverdale Creamery Company, Canton, Pa.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions of the Philadelphia Selling Plan again become effective with January, 1925. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1924.

Beginning with January, milk will be paid for by co-operating dealers on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount, will be paid for on the average New York, 92 score butter, solid pack, price for the month, plus 20 per cent. Milk in excess of the amount equal to the basic quantity will be paid for on a flat average New York, 92 score, solid pack, butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk brought from other producers at price listed thereon.

(2) To all the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk brought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

JANUARY BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

JANUARY BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Miles	Basic Quantity Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.23
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.16
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

JANUARY SURPLUS PRICE
F. O. B. Philadelphia

Test per cent.	Class I Per 100 lbs.	Class I Per qt.	Class II Per 100 lbs.	Class II Per qt.
3.	$2.09	4.5	$1.77	3.8
3.05	2.11	4.5	1.79	3.85
3.1	2.13	4.55	1.81	3.9
3.15	2.15	4.6	1.83	3.9
3.2	2.17	4.65	1.85	3.95
3.25	2.19	4.7	1.87	4.
3.3	2.21	4.75	1.89	4.05
3.35	2.23	4.8	1.91	4.1
3.4	2.25	4.8	1.93	4.15
3.45	2.27	4.85	1.95	4.15
3.5	2.29	4.9	1.97	4.2
3.55	2.31	4.95	1.99	4.25
3.6	2.33	5.	2.01	4.3
3.65	2.35	5.05	2.03	4.35
3.7	2.37	5.05	2.05	4.4
3.75	2.39	5.1	2.07	4.45
3.8	2.41	5.15	2.09	4.5
3.85	2.43	5.2	2.11	4.5
3.9	2.45	5.25	2.13	4.55
3.95	2.47	5.3	2.15	4.6
4.	2.49	5.35	2.17	4.65
4.05	2.51	5.4	2.19	4.7
4.1	2.53	5.45	2.21	4.75
4.15	2.55	5.45	2.23	4.8
4.2	2.57	5.5	2.25	4.8
4.25	2.59	5.55	2.27	4.85
4.3	2.61	5.6	2.29	4.9
4.35	2.63	5.65	2.31	4.95
4.4	2.65	5.7	2.33	5.
4.45	2.67	5.7	2.35	5.
4.5	2.69	5.75	2.37	5.05
4.55	2.71	5.8	2.39	5.1
4.6	2.73	5.85	2.41	5.15
4.65	2.75	5.9	2.43	5.2
4.7	2.77	5.95	2.45	5.25
4.75	2.79	6.	2.47	5.3
4.8	2.81	6.	2.49	5.35
4.85	2.83	6.05	2.51	5.4
4.9	2.85	6.1	2.53	5.4
4.95	2.87	6.15	2.55	5.45
5.	2.89	6.2	2.57	5.5

JANUARY SURPLUS PRICES
At Receiving Stations

Test	Class I per 100 lbs.	Test	Class II per 100 lbs.
3.	$1.52	3.	$1.19
3.05	1.54	3.05	1.21
3.1	1.56	3.1	1.23
3.15	1.58	3.15	1.25
3.2	1.60	3.2	1.27
3.25	1.62	3.25	1.29
3.3	1.64	3.3	1.31
3.35	1.66	3.35	1.33
3.4	1.68	3.4	1.35
3.45	1.70	3.45	1.37
3.5	1.39	3.5	1.39
3.55	1.41	3.55	1.41
3.6	1.76	3.6	1.43
3.65	1.78	3.65	1.45
3.7	1.80	3.7	1.47
3.75	1.82	3.75	1.49
3.8	1.84	3.8	1.51
3.85	1.86	3.85	1.53
3.9	1.88	3.9	1.55
3.95	1.90	3.95	1.57
4.	1.92	4.	1.59
4.05	1.94	4.05	1.61
4.1	1.96	4.1	1.63
4.15	1.98	4.15	1.65
4.2	2.00	4.2	1.67
4.25	2.02	4.25	1.69
4.3	2.06	4.3	1.71
4.35	2.06	4.35	1.73
4.4	2.08	4.4	1.75
4.45	2.14	4.45	1.77
4.5	2.12	4.5	1.79
4.55	2.14	4.55	1.81
4.6	2.16	4.6	1.83
4.65	2.18	4.65	1.83
4.7	2.20	4.7	1.87
4.75	2.22	4.75	1.89
4.8	2.24	4.8	1.91
4.85	2.26	4.85	1.91
4.9	2.28	4.9	1.95
4.95	2.30	4.95	1.97
5.	2.32	5.	1.99

FEBRUARY PRICES
F. O. B. Philadelphia
Country Stations

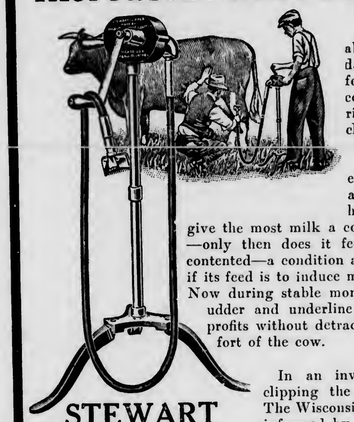
The same prices for basic milk as quoted above for January apply in February, subject however, to change whenever warranted by market conditions.

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37
November	6.3	2.37
December	6.3	2.37
1925		
January	6.3	2.37

How Clipping Cows' Flanks and Udders *Increases Milk Production*



Both here and abroad, farmers and dairymen have found that clipped cows give more milk, richer milk and cleaner milk.

A clipped cow is easily kept clean and the cow is healthier for it. To give the most milk a cow must be healthy—only then does it feel comfortable and contented—a condition absolutely necessary if its feed is to induce maximum milk flow. Now during stable months, clipped flanks, udder and underline will increase milk profits without detracting from the comfort of the cow.

In an investigation on cow clipping the big farm journal, The Wisconsin Agriculturist, was informed by Prof. Hulce, of the University of Wisconsin, that "there is European information to the effect that clipping cows increases milk production about 8%."

To clip a cow requires very little time—and then the cow is cleaned thoroughly merely by wiping with a damp cloth.

STEWART
No. 1 Ball Bearing Clipping Machine

The best made. It's ball bearing. Turns easy. Strong, sturdy and lasting. Anyone can do a good job with it. Easily moved about. Equipped with our latest model B-1 clipping head and new process Stewart cutting plates. Has flexible shaft 6 feet long. Clips cows, horses, mules and other livestock without changing. Price f. o. b. Chicago, $14.00.

CHICAGO FLEXIBLE SHAFT COMPANY
5564 Roosevelt Road Chicago, Illinois
World's Largest Makers of Clipping and Shearing Machinery

JANUARY BUTTER PRICES
92 Score, Solid Packed

	Philadelphia	New York	Chicago
	45 3/4	45	42
3	42 1/2	44 1/2	41 3/4
5	44	44	41 1/2
6	44	43	40 1/2
7	43	42	39 1/2
8	43	42	40 1/2
9	42 1/2	42	40
10	42 1/2	41	39 1/2
12	40 1/2	37 1/2	38 1/2
13	40	39	38
14	40 1/2	39	38
15	41	39 1/2	38 1/2
16	41	39 1/2	39
17	40 1/2	39	39 1/2
18	39	38	38 1/2
20	39	38	37 1/2
21	39	37 1/2	37 1/2
22	38 1/2	37 1/2	37
23	38 1/2	37 1/2	37
24	39	38	37
26	39	38	37 1/2
27	39	38	37 1/2
28	39	38	37 1/2
29	40	39	39
30	41	40	39
31	41	40	39 1/2

CENSUS RETURNS SHOW FARMERS ARE UP-TO-DATE

Complete state farm census returns from Susquehanna and Fulton counties just compiled by the Bureau of Statistics, Pennsylvania Department of Agriculture, show that farmers are keeping in step with the advancement of the time.

The figures indicate that Susquehanna County farmers, totaling 3,873, have 122 radio receiving sets, 586 motor trucks, 2,067 automobiles, 307 tractors and 1,797 silos. In Fulton County, 1,315 farmers have 30 radio sets 166 motor trucks, 857 automobiles, 69 tractors and 36 silos. Farms equiped with electricity total 283 in Susquehanna county and 72 in Fulton county.

Susquehanna and Fulton are the first two counties to send in complete reports in the first triennial farm census to be taken in Pennsylvania.

NATIONAL EGG STANDARDS URGED BY ECONOMIST

National egg standardization is of vital importance to the future development and improvement of the egg industry. It implies the establishment of standards and grades for eggs which may be used in all sections of the country as a basis of grading and marketing eggs.

Among the benefits which may be mentioned as possible to result from the national standardization of eggs are the following:

The merchandising and marketing of eggs is placed on a more intelligent and equitable basis.

Greater stability is obtained in the market price of eggs because values are established on more clearly defined qualities.

Certain risks in the marketing of eggs are eliminated because losses from poor or inferior quality eggs are reduced.

Marketing and distribution of eggs are facilitated because trading is more easily and safely conducted on a better basis for values.

Consumption is increased by better quality products.

Production is more profitable by higher average prices to producers for better quality.

Costs of distribution are reduced by facilitated trading and elimination of risk.

Price to producer is increased and to the consumer decreased through greater economy and efficiency of distribution.—Roy C. Potts, United States Department of Agriculture.

A TONIC AND REGULATOR

For All Farm Stock

Lewis Genuine Linseed Meal

Made the "Old Process" Way

By

John T. Lewis & Bros. Company

Lafayette Building, 437 Chestnut St., Philadelphia, Pa.

Manufacturers of DUTCH BOY Paint Products

This Feed Makes Milk At Less Cost Than Any Other Mixture

This We Guarantee!

International Special Dairy Molasses Feed is actually worth $15 more per ton than corn or oats for dairy use. Corn and oats feed today is selling $10 per ton higher and Special Dairy costs no more than last year. Can you wonder at Special Dairy's popularity? Twenty extra quarts of milk from every sack is guaranteed in any fair test. Compared with wheat feeds or ground grains, this increase has been secured in hundreds of tests.

INTERNATIONAL

SPECIAL DAIRY FEED

"20 Extra Quarts from Every Sack"

International Special Dairy Molasses Feed is accepted as O. K. by dairymen everywhere. One dairyman, with 16 cows, writes us that he increased his milk check $87 in thirty days by using Special Dairy instead of another feed costing the same price. $87 a month is over a $1000 per year! We have hundreds of similar testimonials. If you want *more* milk, sack for sack of feed, then International Special Dairy Feed is your one best bet.

Write to us, giving number of cows owned, also name of local feed dealer, and we will mail you a free copy of our famous book "Feeding the Dairy Cow for Profit." Act!

With 2% Bone-Building Mineral

INTERNATIONAL SUGAR FEED CO., Minneapolis, Minn.

Mills at Minneapolis and Memphis **Live Salesmen and Agents Wanted**

ORDER A TRIAL TON TO-DAY

Cherry-Bassett Company

Complete Equipment for handling Milk and its Products

BESTOV

CANS, CAPS, BOTTLES, PAILS, SEPARATORS, COOLERS
STERILIZERS, BRUSHES, TESTERS ETC. IN STOCK

2324 Market St., PHLA. 33 So. Charles St. BALTIMORE

CHESTER COUNTY FARM PRODUCTS SHOW

The Fourth Annual Chester County Farm Products Show was held in the State Armory, West Chester, Pa., January 6th to 9th inclusive.

The show exceeded, by far, any previous exhibit, and went a long way toward the advertising of its farm and dairy products in the value and variety of the farm products of the county.

In addition to an elaborate display and competition for prizes, the show presented an opportunity for the public to view the many varieties and classes of farm products produced throughout the community.

Meetings of the various farm organizations were held throughout the period of the show, thus affording an opportunity for closer work and co-operation in their various fields of activity.

An elaborate display of farm implements, machinery and appliances was made in connection with the show.

The exhibit of the Philadelphia Inter-State Dairy Council was elaborate. It showed the movement of milk from the producer to the consumer and exhibited the sanitary methods of caring for the milk by scientific methods now followed under the sanitary regulations for milk production now in force.

In the corn show exhibits, Robert F. Brinton, West Chester, won first prize for the best display of thirty ears (Golden Queen), and second prize for ten ears of Yellow Dent corn. The first prize for ten ears Yellow Dent was won by A. R. Coke, Paoli, Pa.

Mr. Brinton was also an exhibitor in the West Chester Farmer's Club, which won first prize among the clubs and his exhibit was a leading factor in capturing this prize.

For the women's exhibits, prizes were awarded for canned vegetables, canned fruit, sponge cake, butter cake, bread, etc.

In the Home Enonomics exhibits, prizes were awarded for jellies, aprons, dresses, etc.

During the period of the show, the Philadelphia Inter-State Dairy Council presented several health plays, including the "Health Circus," and other short plays.

One of the interesting features of the Farm products Show, was the display of milk produced on farms in the county. The judges were, L. W. Morley, of the Pennsylvania State College, and C. E. Wilson, of the Philadelphia Inter-State Dairy Council. Thirty-one exhibits scored over 90.

The first twenty ranked as follows:

Thomas & Howell	Whitford	98.90
William I. Reeves	West Chester, R. D.	98.75
Brandywine Jersey Farm	West Chester	98.70
L. E. Bartlett	Oxford	98.55
Thomas Hadfield	Downingtown, R. D.	98.35
Chas. B. Henderson	Gen Moore	98.15
Kennedy Bros.	Oxfor d	97.95
Brookmead Farms	Devon	97.75
Longwood, Inc.	Kennett Square	97.60
George LeFevre	West Grove	97.40
Lardner Howell	Whitford	97.25
George Thomas, 3rd	Whitford	97.20
Harry Dague	Whitford	97.15
Allen C. Oberle	Downingtown, R. D.	96.80
Conner & Killinger	Avondale	96.60
Meadow View Farm	West Chester	96.40
Parke McCellan	West Grove	96.30
E. P. Allinson	West Chester	96.05
Jas. M. Speirs	Downingtown	95.90
E. M. Crowe	Oxford	95.65

George M. Carter, Robert F. Brinton, Edgar J. Hicks, Norman G. Acker and Thomas Danby awarded the various prizes.

CENSUS OF ICE CREAM MANUFACTURERS

The United States Department of Commerce announces that, according to data collected at the biennial census of manufactures, 1923, the establishments engaged primarily in the manufacture of ice cream and water ices reported a total output valued at $258,666,575, an increase of 21.3 per cent., as compared with 1921, the last preceding census year. This total, however, includes considerable amounts of confectionery, cakes and manufactured ice ,together with smaller amounts of miscellaneous commodities, manufactured as secondary products by these establishments. On the other hand, ice cream and water ices were made to some extent by establishments engaged primarily in other industries. The value of such products thus made outside the industry in 1921, was $29,062,614, an amount equal to 13.6 per cent. of the total value reported for the ice cream industry. The corresponding values for 1923 have not yet been ascertained, but will be shown in the final reports of the present census.

Lime farming pays.

Plenty of bedding for the cows does three things—keeps them cleaner, provides more warmth, and saves more of the liquid parts of the manure.

HOLSTEIN FRESIAN MEETING AND BANQUET

The Pennsyvania Federation of Holstein Fresian Clubs held its annual meeting during Pennsylvania State Farm Products show week in Harrisburg, Pa., when the following officers were elected: President, Dr. L. W. Thompson, South Montrose; Vice President, F. D. Kerrick, Towanda; Secretary-Treasurer, G. H. Truckell, Harrisburg.

The annual banquet of the Holstein Fresian Association was held on Tuesday evening. About 175 members and quests participated. Dr. L. W. Thompson acted as toastmaster.

The banquet was a most enjoyable as well as cosmopolitan affair—in that interspersed among the Holstein Fresian breeders were breeders of the Jersey, Guernsey and the Aryshire breeds.

Toastmaster Thompson, not only called upon prominent Holstein breeders present for brief addresses, but included members of the other breed associations present.

Hon. F. P. Willits, secretary of Agriculture made a brief address, as did also Prof. A. A. Boreland, of Penna. State College.

Vocal selections were rendered by the Holstein Fresian Quartet.

Aunt Ada's Axioms: Electricity in the home will shorten any woman's day and lengthen her days.

PINE TREE SURGE

Grade "A" Milk At Less Cost Than Dirty Milk

Earn the high premiums paid for Grade "A" milk. Yet make your milk at less than the cost of producing the high count, "smelly" milk that is barred from most city markets, Swiss Cheese Factories, and every other place where pure, clean milk is demanded. You can do it with the Pine Tree Surge Milker. We absolutely GUARANTEE it.

Only 4 Pieces of Rubber to Wash

We can guarantee clean milk with the Surge because it is so easy to wash that any man can keep it clean without wasting all the time he has saved by machine milking.

There are no long tubes to breed bacteria. Just the four teat cup inflations to wash. No claws to cause trouble. Just the simple pail and lid.

The Surge can be taken apart—washed *clean*—and put away in less time than you would spend getting any other milker ready for washing.

The Surging Action Milks Better

See it "Surge" and you will realize that here is an entirely new idea in machine milking. It milks cleaner and quicker—milks cows no other machine *can* milk. It leaves the teats and udders in perfect condition—always. The *surging action* does it.

Many breeders who never before allowed a milking machine on their cows, are now enthusiastic users of the Surge. We can prove to *you*, just as we did to them, that this wonderful method has positively revolutionized machine milking. Don't buy any milker until you see what a wonderful job of milking the Surge will do.

If you want more profit from your cows

MAIL THIS COUPON!

If you are already selling your milk at premium prices, we will show you how you can cut your labor production cost in *half*. If you are selling at the ordinary market price, we will show you how to make milk that will bring top premium prices. At the same time we will prove that the Surge will cut your production cost, whether you are now milking by hand or with one of the old type claw machines.

You complain that your cows are not making the profit they ought to. Here is your chance to find out how you can cut the cost of production—and sell for a higher price at the same time.

We don't ask you to buy anything on mere claims. We stand ready to PROVE every statement made in this advertisement. All you have to do is to mail the coupon. It does not obligate you to anything. All it does is to tell us that you are interested. The rest is "up to us". Will you mail that coupon right now? If you really want to make more money out of your cows, you will do it.

Easy Terms

Any man who wants to buy a Pine Tree Surge Outfit after our free demonstration, can make a deal to pay for it on very easy terms. We'll figure with you to keep the cost down by using any equipment you may have already installed in your barn. You'll be surprised how little it'll amount to. Fill in the coupon and mail it right now. It doesn't obligate you to do a thing but listen to the proposition we have ready to make you. Mail coupon now!

PINE TREE MILKING MACHINE CO.

Dept. 2692 118 North Warren Street, Syracuse, N. Y.

CHICAGO 2843 West 19th Street — MINNEAPOLIS, MINN. 750 North Washington Ave. — BERKELEY, CAL. 2692 Prince Street

Pine Tree Milking Machine Co., Dept. 2692

118 North Warren St., Syracuse, N. Y.

Please send me, without cost or obligation, your special offer on the Pine Tree Surge Milker.

I milk _____ cows.

I have electricity. Current _____ Voltage _____

I do not have electricity. (Cross out the one which does not apply.)

(The Pine Tree Vacuum System operates on one-fourth of the horse power required by most systems. Our electric pump can be run on the current from any farm lighting plant.)

Name _____

Address _____

R. F. D. _____

"Health Recipes"

A NEW COOK BOOK

Just the Thing for Every Housewife

Containing methods of using the health-protecting foods, milk and its products, fruits and vegetables

"Health Receipts" has thirty-six colored illustrations, and contains more than one hundred and seventy-five receipts in addition to seasonal menus.

A valuabe recipe book for the home kitchen. Useful also for teachers of cooking and home making. It is so arranged that it may be retained as a complete book, or separated into forty-five cards to fit into a standard size recipe box file.

Special Price to Inter-State Milk Producers' Association Membership

25c Postpaid

GET YOUR ORDER IN NOW

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING

1211 Arch Street

PHILADELPHIA

PENNA. FARM PRODUCTS SHOW

(Continued from page 1)

be as ready to make concessions, especially at the start, as when promoting municipal lighting, suburban, power and other classes of business contributing to its marvelous prosperity. Simply to connect a farm with an electrical distribution line will not suffice. Rural electrification means allowing electricity to do a considerable part of the work of the farm done now by both man and beast and the more or less complete doing away with drudgery in the farmhouse.

"By making electricity available first and then by promoting its free use a revolutionary change can be wrought in our agricultural life. No further generating capacity is required. The problem is one solely of line construction."

Mr. Cooke added that half of the State's farms could have service within ten years and 100,000 of them could utilize that service on a self-supporting basis.

"The annual capital outlay required of the companies to reach these farms", said Mr. Cooke, "will be less than 3 per cent of the capital expended last year in Pennsylvania for electrical development, or about half the announced cost of the Conowingo water-power project.

Following Mr. Cooke's address, John A. McSparran, Past Master, of the Pennsylvania State Grange, made an ardent plea for funds to support the work of Rural Electrical Service Committee of the Pennsylvania State Council of Agricultural Associations, which committee was preparing to wage a fight before the Pennsylvania Public Service Commission for a reasonable rate for rural electrical service.

Mr. McSparran said that to launch the project of power on the farm experts must be hired to determine the farmers' needs and to hire experts, funds were necessary. He estimated that $10,000 was needed. He urged that those present give financial support to this work. Contributions may be forwarded to H. D. Allebach, treasurer of the Rural Electric committee—Boyertown Building, Philadelphia, Pa.

R. J. Tabor, master of the National Grange, followed with an address in which the growth of organization among farmers was featured.

Entertainment and music was furnished by the South Middleton Vocational School, Boiling Springs, Cumberland County, Pa.

Prizes were awarded the following boys and a girl of the vocational schools for project work during the past year.

Sarah Fox, Youngwood High School, Westmoreland County; Maynard H. Hench, Blaine Vocational School, Perry County; Howard Fox, West Sunbury Vocational School, Butler County; Roscoe Corson, Hughesville High School, Lycoming County; Doyle Parker, Orangeville Vocational School, Columbia County.

Sarah Fox, 16-year-old girl, cared for 170 laying hens and 685 other chickens last year and realized a profit of $387.41. She received a gold medal.

Mayard Hench grew eight acres of corn and made a profit of $325. He won first prize in the corn project contest.

More than 6,000 boys and girls engaged in the competition for these project prizes.

"An Economical Boomerang", a one act comedy, was presented as an entertainment feature by members of the Scotland, Pennsylvania Community" of Chambersburg, Pa.

During the weeks of the Show, the Governor and many members of the General Assembly visited the various exhibits.

Electrical Demonstration at the Rutherford Farm—Sawing Wood

Agricultural Commission Meets

The agricultural commission of the State of Pennsylvania, which has held a number of meetings throughout the state, held its final meeting in the Senate Chamber in the Capital on January 21st and 22nd.

Individual and representative members of farm organizations were present to testify on agricultural programs and make suggestions for remedies.

The members of the commission are: Senator Horace W. Shantz, Allentown, Pa, chairman; W. Albert Haines, Bristol, Pa., secretary; Charles W. Sones, Williamsport; Frederick W. Culbertson, Lewistown; Miss Martha G. Thomas, Whitford;; George W. Williams, Wellsboro, Oscar D. Stack, Tunkhannock and Albert Rinn, Bethlehem.

PENNSYLVANIA BREEDERS AND DAIRYMEN'S ASSN.

The Pennsylvania Breeders and Dairymen's Association held meetings on Tuesday, Wednesday and Thursday.

The first days session was Swine and Sheep day; the second, Dairy Day, and the third day was Horse and Beef Day.

On Wednesday morning a joint session was held with the Pennsylvania Veterinary-Medical Association, when papers were read bearing largely on tuberculosis in cattle.

(Continued on page 10)

NEW JERSEY AGRICULTURAL WEEK

The Tenth Annual Agricultural Week in New Jersey, opened in Trenton, New Jersey, on January 13th, and continued during the remainder of that week.

In addition to a Farm Products Show, meetings were held by fifteen different State Agricultural Organizations.

The Farm Products Show was held in the Armory Building. The exhibits including many farm and home economic products as well as exhibits of farm equipment and machinery.

The various organizations holding sessions during the week included the

New Jersey Federation of County Board of Agriculture.

New Jersey State Horticultural Association.

New Jersey State Poultry Association.

Holstein-Freisian Co-operative Association.

New Jersey Guernsey Breeders' Association.

Ayreshire Breeders' Association.

New Jersey State Potato Association.

New Jersey Alfalfa Association.

New Jersey Beekeepers' Association.

Home Economics Project Leaders.

New Jersey Swine Growers.

New Jersey Home Bureau.

County Church Conference.

Extension Workers Conference.

New Jersey Baby Chick Association.

Various meetings of these organizations were held during the week when addresses and topics of interest in the various fields were heard and discussed.

Farm Products Show

The Farm Products Show, which was held in the Armory Building, was large and varied in character.

Home economics and domestic products were featured. The Food and Nutrition exhibits showed various methods of cooking and canning.

An excellent poultry show was on exhibit, over 1,000 fowls were shown.

Grains and vegetables were well displayed.

A model farm, showing the advisability of utilizing uncultivated land for timber production was a unique display of the Department of Conservation and Development.

Corn, potatoes and apples were interestingly exhibited in large numbers.

First prize for a special seed corn exhibit (thirty ears, North Jersey), went to Hoffman Bros., Somerville; South Jersey ,to David Croshaw. Wrightstown, won the first prize; Geo. Phillips, Gibbstown, second; Wm. A. Reid, Mt. Holly, third, and John Harris, Bridgeton, fourth.

The Proof that he can increase your Milk Profits!

THE man in your community who wears this Service Emblem can have a lot to do with your milk profits this year. His emblem means he has passed a course in feeding and by *practical demonstrations has proved his ability to lower the cost of producing milk.* He is no mere "Book Expert." He understands the dairying and feeding problems of your locality from the *cow* end of it.

He carries with him a supply of Milk Record Sheets, and Milk Scales. It's up to him to *show* you more milk on those scales, and a lower feed cost on those record sheets. His service is free.

The feed store with the red, white and blue checkerboard sign has one of these men authorized to give you this free Purina Dairy Service—or can get one of these men for you. Drop in. Talk over your feeding problems with him. You'll find it most interesting—and **profitable!**

Write for the 100-page Purina Cow Book—Free

PURINA MILLS, 854 Gratiot Street, St. Louis, Mo.

Seven Busy Mills Located for Service

COW CHOW CALF CHOW

HIGH SCORES IN FIGHT FOR BEST MILK HONORS

To Burlington County dairymen will go a majority of the awards in the annual market milk contest, conducted by the State Department of Agriculture at the New Jersey Farm Products Show, a feature of Agricultural Week, in Trenton. High standards of all entries made the competition, this year, keener than in any past show, and indicated, market officials say, the trend toward higher standards of milk production throughout the state.

In the inter-city better milk contest, Elizabeth, with an average of 96.3 for its five highest entries, defeated its nearest rival, Atlantic City, whose score was 93.86. Milk entered in the municipal and individual competitions was judged by federal dairy experts and scored on points for freshness, cleanness and quality.

Burlington farmers made a complete clean-up in Class 1, for producers' milk, entered by dealers from stock. Winners and scores were: First, Walter Reeder, Columbus, 98.2; second, Lyman Horner, New Lisbon, 97.3; third, Howard Peinsett, Wrightstown, 96.6. Class 2, for entries by producers from tuberculin-tested cows, gave first to A.Horner & Son, of New Lisbon, 98.5; second, David Croshaw, Wrightstown, 97.7, third, C. C. Tallman, Columbus, Walter E. Wright, Columbus, and David Shaw, Swedesboro, tied with 97.4.

Certified milk honors in Class 3 were won by Woodbrook Farms, Metuchen, 98.5; with second place to Raritan Valley Farms, Somerville, 95.5. Class 4, for pasteurized milk, give first awards to Supplee-Wills-Jones, Atlantic City, 97.2; second, Abbott's Alderney Dairy, Atlantic City, 96.5; third Shrewsbury Dairy, Shrewsbury, 96.2.

THE UNEXPLORER

There was a road ran past our house
Too lovely to explore.
I asked my mother once—she said,
That if you followed where it led
It brought you to the milkman's door.
(That's why I have not traveled more).
—E. St. Vincent Millay.

Uncle Ab says that staying in an organization is more important than getting in; and doing something for it, when you are in, beats them both.

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building **Philadelphia, Pa.**

SURPLUS COSTS INDUSTRY MILLIONS

By FRANK O. LOWDEN

(Continued from page 2)

the world will therefore have to pay more for the necessaries of life. This, therefore, is the consumers' problem as well as the producers.

Law of Supply and Demand Not Self-Operating

"No one that I know of denies the validity of the law of supply and demand and its influence upon farm prices. Some of us, however, deny that it is self-operating so as to preserve nicely a perfect balance between supply and demand. Many errors creep into its daily working through the human agencies which buy and sell in the market place.

"The law of supply and demand does not determine what the economists call the normal price—the price that rules from day to day. Now, somebody must in the first instance name that price. It does not come down from the sky. No oracle announces it. Somebody must say what he thinks a bushel of corn or a pound of lint cotton is worth today. Who is so fitted to make this first declaration as the producer himself. He knows what it costs to produce that bushel of corn or pound of lint cotton. He knows that production cannot go on long unless he at least receives the cost of production.

"The price he sets will not fluctuate from day to day and from hour to hour; nor will it be the football of traders who have no interest in his enterprise and who are concerned only with the trading profits. Why have other producers adopted this course? Because in no way have they found it possible to stabilize their industry.

Equality in Bargaining Power

"The normal price of any commodity is largely determined by the cost of production. For men will not long continue in any undertaking at a financial loss to themselves. The problem is to keep the market price as near the normal price as possible. Now, in the making of the market price the bargaining power of the buyer and of the seller plays an important part.

"Unless there is something like equality of bargaining power upon the two sides of every sale the price resulting is likely to depart widely from the normal price. Why is it that the farmer in marketing his products has suffered most? An organized army is many times as powerful as an unorganized mass consisting of the same number and the same quality of individuals.

"Those forces of society representing the purchasers of farm products in the main have become highly organized, while the farmers have made less progress in that direction than any other other large body of our citizenship. They are therefore at a tremendous disadvantage.

"In other words, their bargaining power has diminished almost to the vanishing point. Indeed, in a vast majority of instances, they do not even assume to name a price, but content themselves with taking whatever the buyer offers.

"Now, there is but one way by which the farmer can regain something of equality in his bargaining power, and that is through organization. This is coming to be recognized more and more in the great business world."

(Reprinted from the January issue of *The Dairy World*).

PENNA. FARM PRODUCTS SHOW

(Continued from page 9)

The speakers were Dr. T. E. Munce, Director Bureau of Animal Industry, Harrisburg, Pa., who spoke on "The Eradication of Bovine Tuberculosis and The Present Situation in Pennsylvania."

Hon. F. P. Willits, State Secretary of Agriculture on "The Requirements of the Department of Agriculture necessary for an Adequate Program of Bovine Tuberculosis Eradication."

Dr. C. M. Christy, Brookville, Pa., spoke on "The Practicing Veterinarian and Tuberculosis Prevention and Eradication Work."

R. R. Welsh, Grove City, Pa., made an address on "What Immediate Action Dairymen take in Support of a Program of Tuberculosis Eradiction."

AFTERNOON SESSION

The speakers at the afternoon session were: E. B. Fitts, Dairy Extension Department, State College, Pa., "Economy in Production, the Basis of Successful Dairy Extension."

H. G. Niesly, specialist in marketing, State College, Pa., "Factors in the Successful Marketing of Dairy Products by the Co-operative Plan.'

C. I. Cohee, Director Quality Control Department, Philadelphia Inter-State Dairy Council, "The Why and How of Clean Milk."

Charles Detweiler, Chief, Sanitary Department, Pittsburg District Dairy Council, Pittsburgh, Pa., "Practical Methods for Determining Quality of Milk."

Breed and Dairy Association Separate

Following the various addresses the question of divorcing the Breed and Dairy branches of the organization were discussed.

The various dairy organizations of the state were particularly anxious to form an organization, identified particularly along dairying lines.

A motion to that effect prevailed. The new Dairy Association preceded with the formation of a formal organization.

Professor A. A. Boreland, of Pennsylvania State College was elected president and Robert F. Brinton, treasurer Inter-State Milk Producers' Association, was elected secretary-treasurer. These officials were authorized to name a committee to prepare plans for a permanent organization and to arrange for a "Dairy Day Program" at the time of the next annual Farm Products Show.

Mr. E. S. Bayard, president of the Pennsylvania Breeder's and Dairymen's Association was given due credit for his splendid services in making past meetings of the organization a success and that a record of the associations work be prepared and incorporated in the minutes of the new association.

A committee on resolutions composed of R. R. Welsh, M. T. Philips, E. B. Fitts, C. D. Sprout and S. A. Root, presented the following resolutions, which were unanimously adopted.

WHEREAS,

Bovine tuberculosis is a serious menace to the health of the people of our state and the cause of a large and growing loss to the live stock interests of the state and,

WHEREAS,

The appropriation for the control and eradication of this disease is inadequate to meet the present situation, therefore, Be it resolved,

By the Pennsylvania Breeder's and Dairymen's Association in annual convention assembled

That the Legislature be asked to create and appropriate a fund of at least $2,000,000 for the next biennium, in addition to the amount realized from the dog tax for the use of the Department of Agriculture in the support of the Bureau of Animal Industry and for the payment of indemnities for cattle condemned and killed for tuberculosis. The $2,000,000 to be set aside specifically for payment of indemnities.

Be it further Resolved

That copies of this resolution to be presented to the Governor, the Secretary of Agriculture, the Chairman of the Appropriation Committee, the Chairman of the Agricultural Committee of the Senate and the Chairman of the Agricultural Committee of the House.

DOG TAX REVISION—

BE IT RESOLVED

That we support the measure now before the legislature appropriating all money realized from the dog tax to the Department of Agriculture for the support of the work of the Bureau of Animal Industry.

Demonstration of Electrical Appliances at the Rutherford Farm, Pennsylvania Farm Products Show

MILK FOR HEALTH

The Modern Treasure Chest

In the days of the Spanish Main the search for hidden treasures brought adventurers to all parts of the world. And most of their travels were in vain.

Today there is a modern treasure chest—Our Big General Catalog—which brings the treasures of the world right to your own doorstep!

You may draw on the endless supply of the best of the world's goods without moving from your own easy chair—and make big savings while you are doing it! Nine million families—or nearly one family of every three in the United States—use our catalogs to get dependable merchandise at money saving prices.

If you are not now getting your share of these bargains, we invite you to look through our New General Catalog for Spring and Summer. One glance will convince you of the savings—one order will make you a regular member of the greatest of all families, banded together to save on almost everything needed for the family, the home, the farm and the shop.

We give the best service—99 out of every 100 orders are shipped in less than 24 hours after they are received.

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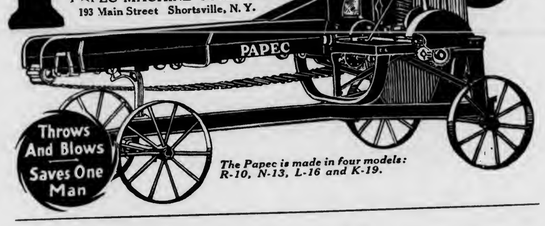
The Cutter that doesn't clog

Blows any height with less power and less labor. The positive Self-Feed saves one man and increases capacity. Simple, rugged construction assures long life with few repairs. Many are giving good service after ten years' heavy use. Every part is easy to get at and adjust. There are no worries and no delays when you put a Papec on the job. Over 50 distributing centers assure quickest service. Prices low for quality.

Write for 1925 Catalog, stating size of silo. We will also send U. S. Govt. Bulletin "Making and Feeding of Silage."

PAPEC MACHINE COMPANY
193 Main Street Shortsville, N. Y.

"Your Neighbor Has One—Ask Him"



The Papec is made in four models: R-10, N-13, L-16 and K-19.

Milk Facts —you can't dodge!

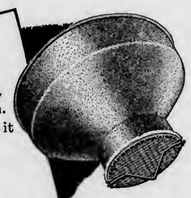
You can't get top-notch prices for milk that is not clean, and you can't remove all the dirt from milk by straining it through cloths or fine mesh wire screen.

The only way to get clean milk is to strain it through sterilized cotton. That is why the

Dr. Clark
Purity Milk Strainer

is guaranteed to get ALL the dirt. The sterilized cotton pad tightly clamped to bottom of strainer removes every particle of dirt, dust, muck and other sediment. The Dr. Clark purity Strainer is the only one on the market that is guaranteed to get ALL the dirt. Used and endorsed by largest dairies and milk producers in the country, including Borden's, Van Camp's, Carnation, Mohawk, and Sheffield Farms.

Made in two sizes—10 quart and 18 quart.
Ask your dealer or write direct for circular and prices.



As the world's largest manufacturer of cotton discs for milk strainers or filters, we can furnish Purity Cotton Discs in any size from 5½ in. to 7 in. diam. for all makes of strainers. Send for a trial order.

Dept. F **Purity Stamping Co.** Battle Creek, Mich.

Sluggish Milk-Making Organs Need Invigorating—Right Now

After several months of dry feeding the extra burden on the digestive and assimilating organs often makes them an easy prey to disease. Cows so frequently approach the calving period below par and serious troubles result.

Now is the time to call Kow-Kare to your aid. Cows approaching calving should have a tablespoonful of this great invigorating medicine twice a day for two or three weeks before and after. Any cow, after a winter in the barn, can be given new milk-making vigor if given a tablespoonful of Kow-Kare in the feed twice daily every second or third week.

W. T. Crum, Coal Run, Ohio, wrote us last spring: "Have used your Kow-Kare before my last three cows came fresh and must say that the results have been wonderful. It greatly improved the condition of both cow and calf and increased the milk supply a great deal. I am an old farmer, and it beats anything in its line that I have ever tried."

If you have trouble with Barrenness, Abortion, Retained Afterbirth, Scours, Garget, Lost Appetite, etc., Kow-Kare will eliminate the disorder by making the digestive and genital organs function normally.

We will gladly send you, free, our famous book, *"The Home Cow Doctor"*, upon request. You can purchase Kow-Kare at feed dealers, general stores or druggists — in $1.25 and 65c sizes. If dealer is not supplied, order direct.

Dairy Association Co., Inc.
Lyndonville, Vt.

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY
PAINTS AND VARNISHES
Write for Color Cards and Booklet "Paint Pointers"
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

COOPERATION

H. D. Allebach

An address presented before the Penna. Assn. of Dairy and Milk Inspections

The necessity of a safe milk supply for public consumption is absolutely imperative.

Speaking as the president of the Inter-State Milk Producers' Association, we have realized this necessity for a long time and have been gradually directing our efforts to a point where we could insist on the production of a safe milk supply not only at the source, but also through the channels of distribution.

In 1923 the plans of the present Sanitary Regulations, now in effect, were adopted by the Producers' Association and cooperating dealers. To a very large extent they are affective throughout the Philadelphia Milk Shed, which embraces the territory covered by southwestern Pennsylvania. (Altoona on the west and Easton on the north.) Southern New Jersey (south of Trenton) the state of Delaware and the eastern shore of Maryland.

In the preparation of these new Sanitary Regulations, not only the producers and cooperating dealers were considered but they had the approval of the various state and local Boards of Health, throughout the Philadelphia Milk Shed. In other words before the Sanitary Regulations were finally adopted and became effective they had the cooperation of practically all of the official and cooperating forces within the Milk Shed.

Close cooperation of this character, we believe, is the only way, in which such regulations can be adopted and satisfactorily enforced.

In this way we have the best form of cooperation, in which the producer, distributor and the consumer (through the Boards of Health) operate in unison.

In some cities and towns milk is being received and distributed for human consumption that should be either pasteurized or come from accredited herds. In instances no sanitary regulations are being enforced, either on the farms or in distributors' plants. This condition we do not approve of.

We fully realize that the milk is a very important food and should, therefore, be produced and distributed only under strict regulations.

The production and distribution of milk should be protected and the protection enforced from the farm to the consumer's door step.

We do not believe that any Board of Health should adopt or enforce any unreasonable regulations, but that safe regulations should be required in every city and town.

The Inter-State Milk Producers' Association has assisted various state and local Boards of Health and is willing to cooperate with any Board of Health in the Philadelphia Milk Shed to enforce any regulations that are safe and sane and sufficiently strict to protect the health of the people in the community.

Practically all of the milk coming into the city of Philadelphia at the present time is being produced under the Inter-State Milk Producers' Association's Sanitary Regulations.

These regulations are being enforced by the Quality Control Department of the Philadelphia Inter-State Dairy Council, in cooperation with the various Boards of Health.

During the past year this department has inspected 15,485 dairy farms and issued 15,502 temporary permits.

Over 3,000 permanent permits have been issued and additional permits will be issued as fast as final inspections of the various farms and distributors are made.

The Quality Control Department has the authority and has enforced its perogative to discontinue the shipment of milk to cooperating distributors from farms that do not comply with the Sanitary Regulations.

Through this agency the Inter-State Milk Producers' Association is endeavoring to furnish to the consumer a fluid milk product that is not only safe and sane but also of the highest degree of palatability for public consumption.

The highest form of Quality cooperation is that where each milk producer and milk dealer is doing his best to help in delivering daily to the consumer the very best milk possible. We feel that the Quality Control work we have been doing has already shown the way that the farmers and dealers can best be gotten to cooperate.

WATER FOR COWS

There can be no question but that there are many cows in the State whose annual production is lower than it should be because of lack of water. Especially is this true when the cows go into winter quarters, for there are many barns that are not equipped with facilities for watering in the stanchion.

The cows are often put in at three or four o'clock in the afternoon, and are not turned out until ten or eleven in the morning, and have no opportunity of securing water during this time.

The farmer who has been keeping his cows in this manner, and later puts in the automatic water is surprised at the number of times daily a cow will drink when given a chance to do so.

It must be remembered that 87% of milk is water, and about 50% of the animal carcass. The more milk the cow gives the greater her water requirement. Cows will drink from 60 to 200, and even more pounds of water a day. The Vermont Station secured an increase of 2% in milk when cows had water before them at all times.

I have known of men trying to make an advanced registry record, and turning the animal out to drink once a day. A cow can only do her best when comfortable, and if she can get water only once or twice daily, do not expect best results or blame her if she fails to meet your expectations.

See that your cow gets plenty of water at all times.—Exchange.

In recent years various methods have been developed for encouraging the adoption of better livestock and improved methods of handling and feeding them. Five years ago the department started the better sires-better stock campaign and now there are more than 15,000 farmers throughout the country who have pledged themselves to use nothing but purebred sires of any kind on their farms. Other factors in present-day livestock improvement are boys' and girls' clubs, demonstrations, exhibits, ton-litter clubs, thousand-pound calf clubs, country-sire-sales plan, cow-testing associations, stallion registry, co-operative bull associations, ram rings, poultry improvement activities, and various other means.

THE ELECTRIC FARM

(Continued from page 1)

Dickerman, Giant Power Survey; R. U. Blasingame, Penna. State College; Fred Brenckman, Penn. State Grange; M. T. Philips, State Council of Agricultural Associations; W. H. Horton, Jr, and H. R. Palmer, Penna. Electric Association. C. K. Steinmetz of Harrisburg, Pa., acted as manager of the project.

Appliance	Consumption	Cost per Hour in Cents @ 6c	@ 3c
Bathroom and Bedroom			
Heater	.630	3.80	1.90
Curling Iron	.020	.12	.06
All night lamp	.008	.05	.025
Ten inch desk fan (oscillating)	.036	.22	.11
Heating pad	.020 to .06	.12 to .36	.06 to .18
Dining Room			
Table stove	.165 to .660	1. to 4.	.5 ot 2.
Perculator	.4	2.4	1.65
Toaster	.55	3.3	1.65
Kitchen			
Refrigerator	.2	1.2	.6
Dish washer	.125	.75	.375
Range (Av. Max. Demand)	4.000	24.	12.000
Laundry			
Washing machine and wringer	.2	1.2	.6
Iron	.55	3.3	1.65
Living Room			
Radio Set	.0075	.045	.023
Sewing Machine	.03	.02	.01
Vacuum cleaner	.2	1.2	.6
Bran—Shed—Yard			
Threshing machine and cleaner	4. to 7.5	24. to 45.	12. to 22.5
10 H. P. Motor	7.5	45.	22.5
Clipping Machine	.125	.75	.375
Feed grinder	7.5	45.	22.5
Ensilage cutter and blower	7.5	45.	22.5
Hay Bailing press	7.5	45.	22.5
Corn sheller	1.5	9.	4.5
Chicken House and Dairy			
Brooder	.25	1.5	.75
Milking machine	.2	1.2	.6
Churn	.125	.75	.375

The above prices are based on rates obtaining for electric power in some of the other territories in the United States, and represents costs at such rates.

PENN STATE COLLEGE AT THE SHOW

Telling the story of better gardening, orcharding, dairying and living by charts, maps and demonstrations is what the Pennsylvania State College educational exhibit was doing at the State Farm Products Show.

The message of better dairying was flashed to the visitors by an electrically lighted map which shows that there are 40 cow testing associations, 34 bull associations and 25 co-operative dairy associations in the state. A demonstration showed how to stop the dairy leaks of low quality products, poor feeding, scrub sires and inferior cows by producing high quality products, employing balanced rations in feeding, using bull associations and better sires campaigns, and testing and recording the performance of individual cows.

Storage of vegetables was nicely portrayed by the use of model storage cellers and pits, while the handling of nursery stock for propagation is cleverly demonstrated by use of charts and actual trees.

Spray materials, codling moths, leaf rollers, bud moths and Oriental peach moths had not been forgotten even during the winter months by the entomologists. And last but not least was the home economics exhibit displaying the needs of the body as compared to those of an automobile, the standards of foods advocated by nutrition specialists and the standards of needlework used by modern seamstresses.

It's never too late to start keeping records on your cows.

The soil on a good farm gets better every year.

157,368 PENNSYLVANIA FARMERS USE AUTOMOBILES

According to figures collected on December 1 and compiled by L. H. Wible, State Department of Agriculture, approximately 157,369 Pennsylvania farmers or 78 per cent of all in the state are using automobiles. This represents an increase of 6 per cent during the past year. The number has more than doubled since 1919. In 1915 only 7 per cent of the farmers had automobiles; in 1916, 9.5 per cent; 1917, 14 per cent; 1918, 27 per cent; 1919, 37 per cent; 1920, 46 per cent; 1921, 55 per cent; 1922, 60 per cent; 1923, 65 per cent; and January 1, 1924, 72 per cent.

The ten leading counties in total number of automobiles used by farmers are:

Lancaster	83	9,384
York	78	6,098
Westmoreland	92	5,146
Berks	84	5,111
Chester	87	4,792
Crawford	72	4,695
Bucks	78	4,457
Bradford	78	4,126
Washington	91	4,079
Butler	75	3,956

Mr. J. O. Eastlack, who has been with the Quality Control Department of the Philadelphia Inter-State Dairy Council since March, 1924, has resigned to accept a position as economist for the Maryland State Dairymen's Association. Mr. Eastlack is well qualified for a position of this kind, having specialized in agricultural economics at Cornell. In his new work Mr. Eastlack will be engaged in collecting information for and working with the details of the new sales plan of the Maryland State Dairymen's Association.

Sugared Schumacher Feed

For Health—For Large Production For Economy — For Profits

Sugared Schumacher Feed meets the needs of the dairy cow and the dairy farmer.

Sugared Schumacher Feed is ideal as a ration for the entire dairy herd. Start your young calves on it. Grow and develop the yearlings on it. Build up the dry cows and springers with it. Make your milking herd most profitable by its liberal use.

Sugared Schumacher Feed is essentially a scientific blend of choice products of corn, oats, wheat and barley with the right amounts of molasses and mineral compounds.

It is very palatable—Cows relish it. It is highly digestible—Cows thrive on it. It is varied — Cows continue to like it. It is rich in carbohydrates—Cows need it. It is economical—Dairymen make money with it.

Blackburn College Farm, Carlinville, Illinois

The Quaker Oats Company,
Chicago, Illinois.

Dear Sirs: "Here at Blackburn College we have a milking herd of seventeen pure bred Holsteins which we feed for maximum production.

"I have always ground and mixed my own feed until I discovered Sugared Schumacher Feed because I believed it cheaper and better. Sugared Schumacher Feed has nothing in it but feed and I consider it the purest, finest feed there is on the market. I have fed it to our herd here at the college for almost a year and from the first have had very remarkable results as is proved by the accompanying illustration. The cow in the picture is a three year old. She is being fed 8 pounds of Sugared Schumacher per day with some supplementary feeds. Her milk record for March was 2,473 lbs. of milk which is phenomenal. This production I attribute principally to good care and to Sugared Schumacher Feed, which is the basis of her ration.

"As long as The Quaker Oats Company put into Sugared Schumacher Feed the quality they are now putting into it and I have cows to feed I shall never be without it."

M. H. ALEXANDER, Farm Superintendent.

Suggested Rations

With alfalfa or good clover hay, feed Sugared Schumacher Feed straight. With mixed clover and grass hay, feed Sugared Schumacher Feed combined with an equal amount of Boss Dairy Ration. With timothy or grass hay, feed one part of Sugared Schumacher Feed combined with two parts of Boss Dairy Ration. D-20

The Quaker Oats Company
Dept. 1665 Address—Chicago, U. S. A.

LET US DESIGN YOUR STATIONERY

PEDIGREE CATALOGS OUR SPECIALTY

HORACE F. TEMPLE
PRINTER
BELL PHONE No. 1 WEST CHESTER, PA.

Always!

The Same Formula **Larro** The Same Feed

The Larro formula will never be changed, regardless of the cost of ingredients, unless a better one is found and *proved.* This because the Larro formula, by years of experiment and practical feeding tests, has demonstrated that it will economically produce the most milk and keep cows in health and condition.

Each ingredient is brought to an exact standard before being used, then accurately weighed into the mixture. The amount of each ingredient per ton of feed never changes. The result is always the same feed—no matter where you buy it, or when.

The Larrowe Milling Co.
Detroit, Mich. 539

ARE YOUR COWS Losing Their Calves

You Can Stop Them Yourself AT SMALL COST

Ask for FREE copy of "The Cattle Specialist," our cattle paper. Answers all questions asked during the past thirty years about abortion in cows. Also let us tell you how to get the "Practical Home Veterinarian", a Live Stock Doctor Book, without cost. Veterinary advice FREE. Write tonight. A postal will do.

Dr. David Roberts Veterinary Co., Inc., 153 Grand Ave., Waukesha, Wis.

Protection

Unadilla Silos Protect your corn and your investment as well. They successfully resist severe weather conditions and pay their cost *many times over* in *real service* and the high value succulent feeds they give you, year after year.

In *addition,* they protect *you* from danger. The permanent safety ladder, formed by the door fasteners, is convenient and secure. Hoops are *easily* adjusted from this ladder—*no* risky adjusting from easy slipping ladders.

The whole front is a masterpiece of silo construction—in convenience, time and work saving features, and continual, trouble-free service. It comes to you wholly assembled—ready to set up.

These features, plus great strength and long, storm-defying life are some of the reasons why *most* dairy owners in the east prefer the Unadilla.

All the reasons—important to *you*—are fully covered in our

Big Illustrated Catalog

Send for it!
Right now we are offering *liberal discounts* for early orders and cash.
Easy Payments if desired.

UNADILLA SILO CO.
Box D Unadilla, N. Y.

Willard

Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, makes and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

Planning the home grounds now should precede planting in the spring.

Aunt Ada's Axioms: Your own living room is the real center of the world.

A farmer in one community can capitalize on the experience of farmers in other communities through the medium of the county agent.

MILLIONS OF CATTLE WAIT FOR TUBERCULIN TEST

With 9,000,000 cattle already under supervision for the eradication of tuberculosis, veterinary officials of the United States Department of Agriculture and the various States are making efforts to meet the continued demands for additional testing. A summary of the status of the work up to December 1 shows a waiting list of 226,534 herds containing more than 2,500,000 cattle. This list represents applications for testing in 34 States, the others having been able to handle the testing as fast as requested.

The States which had "clear slates" in this respect at the time the summary was prepared were: Arkansas, Delaware, Georgia, Kentucky, Louisiana, Missouri, Montana, Nevada, New Jersey, Oregon, Utah, Virginia, Washington, Wyoming, and the District of Columbia.

During November official veterinarians tested more than 50,000 herds or lots containing more than 600,000 cattle. Of this number, about 18,000 cattle reacted as tuberculous and were removed from the herds, thereby leading to the establishment of accredited herds and areas.

WHY AND HOW OF CLEAN MILK

C. I. Cohee, Philadelphia Inter-State Dairy Council

Every good dairyman is interested in clean milk and is desirous of putting his milk on the market in the best possible condition, consistent with practical dairying.

He realizes, also, that a good product invites a greater consumption and that a greater consumption results in a better demand and a stabilized market.

We, as dairymen, must not lose sight of the consumer's demands. Quality makes the market, and if we do not maintain the quality we may lose our market to others who will produce better milk.

Have you ever asked the question, "Why do people buy one particular article in preference to another?" Why do some people ask for a red apple when there is a yellow apple of perhaps better quality beside it? Why does the New Yorker buy the white eggs in preference to those having brown shells and pay several cents more a dozen for them? Perhaps you and I would not discriminate between apples and eggs because of their color, but it is a well established fact that many people do, and—sometimes—to such an extent that there is a marked difference in the selling price.

Let us ask ourselves the question, "Why do people buy milk?" If we were to ask the question of everyone here we should undoubtedly receive a great variety of answers. Some would say they bought it to give them strength; some, for the baby; to cook with; to drink; to use on cereal or in coffee, etc. There are some who could not think of any reason why anyone should buy milk.

Recently the Bureau of Markets of the U. S. Dept. of Agriculture asked this question in a survey of several hundred Philadelphia housewives, located in all sections of the city, and in families of many races and financial conditions. Of all the answers given there was one given more than any other—that was, "I buy milk because I like it," or "John likes it," or some other member or members of the family "like it." The appeal, then, is not to the eye, but to the palate. Milk is used because people "like it."

Cleanliness and flavor, together with a satisfactory cream line, are of vital concern to the consumer and must, therefore, be of equal concern to the milk producer.

A great many dairies produce a good quality of milk and then ruin it by permitting it to cool in the cow stable or in the watering trough, subject to all the odors of the barnyard and stable and often the odors of the hog pen thrown in for good measure.

Again we have the case of the dairyman who spoils the flavor of his milk by poor feeding methods. Care should be exercised in feeding the cows to so arrange the feeding period that the feed will not impart the flavor of the milk. Wherever feeds of doubtful quality must be used, feeding should be done immediately after milking and not during or before the milking period.

Just recently we have had an epidemic of bitter milk in a section where vast quantities of mouldy corn fodder, mouldy corn and poor hay have been fed just prior to milking.

Every dairyman should provide a suitable milk house on his farm for the care and handling of the milk. I do not know of any one factor in connection with the dairy buildings that is so important as the milk house. We should not only have a milk house but should *use* the milk house after we have it. We still find some farmers cooling their milk in the barnyard watering trough, and allowing the milk to remain in the stable overnight without cooling, or setting the warm milk outside the barn doors, but this is being corrected as fast as possible. In many cases complaints due to bad flavor and odor can be directly traced to producers who neglect the cooling of their milk during the winter months and who do not use their milk house for the storing of milk.

The cow stables should be constructed with a view to keeping the animals clean and comfortable.

Of great importance are the platforms where the cows stand. They should be of proper length to accommodate the animals and should be provided with a gutter to care for the manure.

Wherever it is possible to do so, arrangements should be made so that the stanchion is adjustable for the various lengths of cows.

Clipping the flanks during the fall and winter months prevents much of the accumulation of manure and filth from adhering to the flanks of the cows and is an aid in the production of clean milk.

A suitable amount of bedding is essential to keep cows clean.

Tight ceilings—which will prevent dust and dirt from falling through and contaminating the milk supply—is another important factor of the stable construction.

The consumer of milk has a right to expect that the milk which he is buying be produced on farms that are properly equipped—farms that have a milk house, clean stables—properly whitewashed, and sanitary pails in use. These various conditions make it imperative that satisfactory regulations be imposed and an inspection of such premises made.

In view of these requirements steps must be taken to make sure that the careless producer, who is not interested in the demands of the consumer, be obliged to provide suitable conditions and equipment for dairying on his farm.

In the Philadelphia territory, where the inspection work is a cooperative movement on the part of both the producers and dealers—cooperating through the Philadelphia Inter-State Dairy Council—the Quality Control Department is carrying out the provisions of the regulations. The responsibility of the producer has been fully realized and a vigorous campaign has been carried on for several months to induce every dairyman to maintain such sanitary requirements on his farm. Approximately 15,000 farms have been inspected in this cooperative work, with the result that something over 200 careless dairyman have lost their market.

While it is true that a careful dairyman may produce milk of an excellent quality under the adverse conditions, it is equally true that the consumer has a right to expect the dairy farmer to provide adequate plants and equipment for the carrying on of his business.

The automobile has brought the city consumer closer to the country. The milk consumer of today is an observant individual and moulds his opinions as to conditions on the farm—particularly as far as his view of his milk supply is concerned. This goes a large way toward not only his own consumption of milk but also that of his neighbors and friends.

COMPLETE ELECTRIC OR STANDARD EQUIPMENT $87.79

FORDS MILKER

$87.79 $87.79

Fords Milker—at new amazingly low price, $87.79, highest quality guaranteed—is an opportunity whether you own two cows or fifty. Simple and trouble proof. Built with every latest improvement, the result of 14 years' experience—and absolutely guaranteed!

GUARANTEED

It is a single or double unit machine. Works as fast as two men—at a fraction of the cost. Does not irritate cows. Operates exactly like hand milking, a complete vacuum release with each pulsation. No puzzling mechanism—only two detachable parts to teat cups, three to valve chamber. Rubber valve trap assures airtight, dirtproof valve chamber. Your choice of electric milker (1/6 h. p. motor with electric) or standard equipment. Standard equipment will handle ten cows in single row. More shafting or rows at slight additional cost. Guarantee protects you. Should last twenty years.

Why We Sell at This Low Price, $87.79
Fords Milker saves you many dollars. You'd like to know how quality and performance are kept 100% and price almost slashed in two. Remember, guarantee with every machine. Get the facts. See your dealer or fill out the coupon—NOW. It costs nothing to learn the details of how 14 years' experience will save you time, labor and money.

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Dept. 184 215 N. Desplaines St., Chicago

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Without obligating me, please send full particulars regarding Fords Milker.
Name .....
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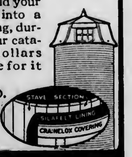
Dealers: Write for Offer!

Dollars in your Pocket!

It *pays* to own a Craine Triple Wall Silo. Its three wall construction insures exceptional strength and durability! Once up you can forget it; no lugs or hoops to tighten. It makes good silage and *keeps it good!* You get more *beef* and *more milk* for less feed money.

You can rebuild your old stave silo into a handsome, strong, durable Craine. Our catalog is worth dollars to you. Write for it TODAY!

CRAINE SILO CO.
Box No. 230 Norwich N. Y.



CRAINE TRIPLE WALL SILOS
THE SILOS OF GIANT STRENGTH

A warm cow may not always be contented, but a contented cow is always warm.

Is your tractor "shedded?"

A dairy barn doesn't need to be costly to be clean.

Ever think about changing over to a **standard track sleigh?**

MILK HANDLERS CAUTIONED TO BE CAREFUL IN WINTER

In cold weather the bacterial count of milk may be low, while sanitary conditions may not be what they should be, says the Bureau of Dairying, United States Department of Agriculture. The mere presence of winter, say the experts, should not lead milk-plant operators to relax care in keeping everything strictly sanitary. Although the colder atmosphere makes it easier to keep bacteria under control, a low count does not mean so much as it does in summer.

Men who handle milk are cautioned to take particular care, even when laboratory tests show satisfactory results, to see that milk does not leak through valves before it has been held long enough in the pasteurizer, as such leakage may thwart the purpose of pasteurization. Emphasis is laid on the work of bottle and can washing machines to see that sprays are not clogged, that worn and broken brushes are replaced, that alkali solutions are of proper strength, and that sufficient heat is being applied. The temperature of pasteurization is called the most important of all factors, and for this reason thermometers must always be kept in order.

FARM WAGES AND LABOR SUPPLY IN NEW JERSEY

The average wages being paid for farm labor at present is estimated as follows: By the month with board, $44.00, as compared with $45.00 last year; by the month without board, $65.00 as compared with $70.00 last year; by the day with board, including piecework, $2.45 as compared with $3.70 last year.

The supply of farm labor at present is estimated at 90 per cent. of a normal, and the demand at 88 per cent. of a normal, making the potential supply about 102 per cent. of a normal, as compared with a potential of 100 per cent. on December 1; 94.3 per cent on November 1 and 97.8 per cent on October 1, 1924.

PREVENT CONCRETE FREEZING

Farmers who mix concrete in the winter will have no trouble if they will heat the materials, such as sand, stone and water, and keep the work covered to prevent freezing until the concrete is set. This applies to walks and septic tanks. Building of concrete posts should be postponed until warm weather.

DIRECTORS' MEETING

The next meeting of the Directors of the Inter-State Milk Producers' Association, will be held at its headquarters in the Boyertown Building, 1211 Arch Street, Philadelphia, on Friday, February 27th, at 9.30 a. m.

KEEP CALVES GROWING

Keep calves and young stock growing and in a thrifty condition. Their future and usefulness depends largely upon care given now.

In a study of the retail meat business the United States Department of Agriculture found that of the average consumer's dollar received by the retailer the meat costs 78.6 cents, the retailer's expenses were 19.7 cents, and the profit was 1.7 cents. When a reasonable wage is allowed for the proprietor of the business it is hardly possible to show a profit on a yearly volume of sales of less than **$14,000 the department found in its survey.**

THE OLD DAIRY COW

The farmer's best friend is his old
dairy cow;
If he owes a debt, she will pay it somehow;
She grazes the roadside to eke out her
life
And works without wages, the same as
his wife.

Though Jersey or Holstein or Shorthorn her breed,
Hard work is her habit and thrift is
her creed;
And if, when she comes home at night
to the barn,
You praise her or blame her, she don't
care a darn.

She always has something to add to your
pelf,
She brings in the coupons, just clip them
yourself—
Get out the old milkstool, sit down with
a bump,
Grab hold of her handles and umpety-
pump.

And if, in her efforts to bush off a fly,
She happens to switch her tail spang in
your eye,
She murmurs, Beg pardon," plitely, and
then
Goes on with her chewing—and does it
again.

She helps with the living and keeps us
all fat.
The hired man, the baby, the pig and
the cat;
Then dad takes the surplus to town, and
by Heck,
The creamery gives him a wonderful
check.

And when she is ready to die of old age,
The butcher writes "Finis" at the end
of her page;
Then back to our table she comes, I'll
be bound,
In prime ribs and steaks that cost thirty
a pound.

All hail to the heifer ,the steer and the
calf,
The curly-faced bull, with his bangs full
of chaff,
But when at your evening devotion you
bow
Give thanks for that treasure—the old
dairy cow.

COW TESTING GROUP HAS UNIQUE RECORD

Bedford, Pa., Feb. 3—The Bedford County Cow Testing Association has a record other similar groups might well view with pride.

According to M. Shingledecker, tester, 24 of 26 members in this association have silos. Twenty-three are feeding silage now, and of these, nineteen are also feeding hay. Fourteen of the members belong to the bull association and ten of the others are using pure bred sires. Only two members use scrub sires, and one of these has purchased bull calf.—Exchange.

TEST SEED CORN

It will be only a few months until corn planting will be with us again. There is a great deal of poor seed in the country. If seed corn ever needed the ear test it is this year. It is better to be safe than sorry.

Don't guess—measure. Many a good recipe has failed because a "level" cup **was "heaping."**

KERR'S LIVELY CHICKS

Raise HEAVY LAYERS —in five months' time

This FREE book tells how

Kerr's special mating Lively Chicks are sired by birds raised on our own breeding farms. Pullets of these strains have just won high honors for us in the Vineland and Bergen County Egg Laying Competitions.

Kerr's utility Lively Chicks are pure-bred born egg producers. They have a long ancestry of heavy producers back of them. 100% live delivery of sturdy, vigorous chicks *guaranteed* on every order.

Lively Chicks will lay in five months' time. Our book, "How to raise baby chicks—and make them lay in five months," tells you how to start profitable laying—and keep it up. Write for it, together with "The Poultry Outlook for 1925" and our low prices—*Free.*

THE KERR CHICKERIES, Inc.
(Member International Baby Chick Association)
Box 37, Frenchtown, N. J. Box 37, Newark, N. J.
Box 37, Springfield, Mass. Box 37, Syracuse, N. Y.

SILO FACTS

acid-rust-freeze-wind-fire-PROOF — air-tight no swell and shrink troubles

ROSS IN-DE-STRUC-TO METAL SILO

WE build Ross Metal Silos, but users sell them. Why Ross Metal is superior told by successful farmers in 40-page unbiased, most practical and helpful silo booklet ever written. FREE if you ask for "Users' Own Words"—No. 33

We have a wonderful proposition for dealers and agents.

E. W. ROSS ENSILAGE CUTTER AND SILO CO.
Established 1850
33 Warder St., Springfield, Ohio

CRUMB'S Chain Hanging Stanchions

are guaranteed to please the purchaser. They are shipped subject to trial in the buyer's stable. They are right.

Send for booklet

WALLACE B. CRUMB
Box 2. Forestville, Conn.

TEAT **TRIEVE** SAVES TEATS From Going Blind

For SPIDER, INFECTIOUS SCABS, INJURED or FROSTED TEATS. Apply Teat Trieve when cows' teats have orifices scabbed over or ball-like swellings near the end. Quickly relieves soreness. Restores teat to normal before udder becomes affected. Prevents contagion. Invaluable to all Dairymen. Kept on hand, saves time and losses. Price $1.00, postage prepaid. C.O.D. Satisfaction guaranteed.

HICKOK PRODUCTS CO. AWATONNA, MINN.

Old Money Wanted

Inspect every coin you get. Many worth big premiums. Will pay $50 for 1913 nickle with Liberty head (not Buffalo); $50 for 1894 dime S. mint. Coins as late as 1916 are worth cash premiums. We pay cash premiums for all rare coins. Get posted so you will know a valuable coin when you see one. Send 4c for large coin circular. May mean big profit to you.

NUMISMATIC BANK, Dept. 376. Fort Worth, Tex.

This **FREE** *Book tells how other Farmers stopped* **Contagious Abortion**

Fully describes causes and disastrous effects of this widespread disease, and points the way to an easily administered treatment that cannot injure animals and is guaranteed to end the trouble and prevent loss of calves. Write today.

ABORNO LABORATORY
32 Jeff St. Lancaster, Wis.

FOR SALE

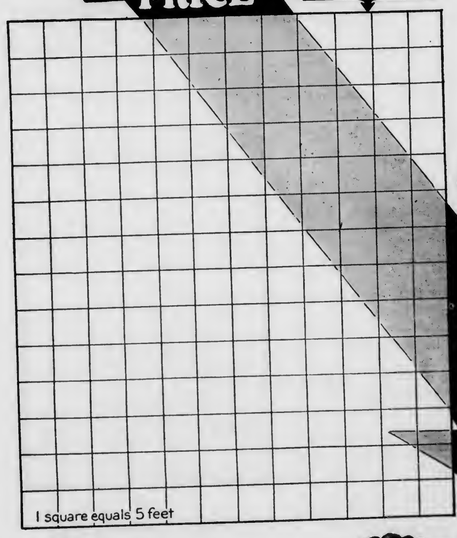
Choice Seed Corn 1000 bu. 100-day Improved Yellow Dent; 500 bu. Lancaster County Sure Crop; 300 bu. Early White Cap, nearly all 1923 Crop, all high germination. Write for price, Sample and Circular. Order early and save money.

SNULL FARM Box 14A, Tullytown, Bucks Co., Pa.

Let us figure with you for a DeLaval Milker

Send us this information and we will give you the PRICE

Make a sketch showing the arrangement of your cow barn and send it along with the information requested below. You will find it convenient to lay a thin sheet of paper over the ruled space below, using the cross lines as guides.



NOW that you are planning your work for the coming season you are looking for ways and means of increasing your profits, by cutting expenses or producing more. If you are milking 10 or more cows a De Laval Milker will help you do both. Plan now to get along with less help by installing a De Laval Milker, or plan to keep more cows with the same help you now have. Send us the information requested below and we will gladly send you, without obligating you in any way and free of charge, plans showing just how a De Laval Milker should be installed in your barn, and approximate prices. Then if you decide it would be cheaper to hire a De Laval Milker than to hire extra labor, you will have plans which will insure proper installation and satisfactory work.

A Wonderful Money Maker for Dairymen

Answer these Questions

Thousands of users say their De Laval Milker is the best investment they ever made and that they wouldn't part with it for twice its cost; many go so far as to say they would sell their cows if they couldn't have one. Your only regret after you put a De Laval Milker to work will be that you didn't get one sooner—and the longer you use it the better you will like it.

Conservatively figured, a De Laval Milker will make at least $20. per cow per year in saving time and increased milk which usually comes as a result of its use and because of its regular, stimulating and soothing action. A De Laval Milker usually makes much more than this, frequently saving one or more men.

In addition, when it is considered that cleaner milk can be produced, that the drudgery and dislike of hand milking are eliminated, and that dairying is made more pleasant for owner, son or hired man, you have the answer why so many people are installing De Laval Milkers.

Prices Reduced

Owing to the rapidly increasing use and popularity of De Laval Milkers, savings in their manufacture have been made which make possible reduced prices for 1925. There is now no longer a good reason why any owner of 10 or more milch cows should be without a De Laval Milker.

You Can't Get De Laval Results Unless You Use A De Laval Milker

It is possible to get mechanical milkers for less than the first cost of a De Laval—but you can't possibly get the same results. There are now more than 25,000 De Laval Milkers in use, and

—we have never known of one to injure a cow;
—the action of the De Laval is so pleasing and stimulating that cows almost invariably produce more milk;
—the De Laval is practically fool-proof and does not require a skilled operator;
—it not only milks better but faster, thus saving more time;
—it is easy to wash and keep in a sanitary condition.

Therefore, the De Laval is by far the cheapest in the end.

The De Laval Separator Company

New York 165 Broadway — Chicago 29 E. Madison St. — San Francisco 61 Beale St.

Free— De Laval Milker Engineering Service

THE DE LAVAL SEPARATOR CO., Dep't 9826
165 Broadway, New York — 29 E. Madison St., Chicago
61 Beale St., San Francisco

Gentlemen:

Without obligating myself in any way, I am sending you the following information, together with a sketch of my barn plan, with the understanding that I am to receive a drawing showing how a De Laval Milker would be installed in my barn and the approximate cost.

1. State maximum number of cows to be milked.....
2. How many rows of stanchions to be fitted up?.....
3. How many cows or stanchions in each row?.....
4. How long is each row of stanchions?.....Feet
5. How far between the rows of stanchions?.....Feet
6. Is there an alley from side to side?.....In center?.....On end?.....
7. Is there anything to prevent running a pipe line from stanchion row to stanchion row?.....In center?.....At end?.....
8. How high above the stanchion row will it have to be placed?.....
9. Have you steel stanchions?.....What make?..... or wooden stanchions?.....
10. How near to the stanchions in feet can the pump be placed?..... (Please locate on sketch)
11. Have you electric power?....If so, give Voltage....Phase...Cycle...
12. Have you a motor?....If so, state H. P.....Speed....Size Pulley....
13. Have you a gas engine?...If so, state H. P....Speed...Size Pulley...
14. How many milker units will you require?..... (One man with 2 units can milk and strip 20-25 cows per hour.)

Name.....
P. O. Address.....State.....

Milk Producers Review

INTER-STATE

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY ... STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME V — WEST CHE... ...LPHIA, PA., MARCH, 1925 — NUMBER 11

AMERICAN INSTITUTE OF CO-OPERATION

First Session to Be Held at the University of Pennsylvania

Plans have been completed and it has been recently announced that the first session of the American Institute of Co-operation will be held at the University of Pennsylvania, Philadelphia, Pa., to cover a four weeks period, beginning July 20th, 1925.

The American Institute of Co-operation has had the strong support of the National Co-operative Milk Producers' Federation from its inception. Other farmers' co-operative organizations have enthusiastically aided in its growth and final development.

The Institute is incorporated as an educational institution. Its management is vested in a board of twenty-one trustees, selected from a general assembly formed by the participating associations.

The Institute represents the joint efforts of thirteen great farm groups, two national organizations of State officials connected with agriculture and a national organization of agricultural economics. Co-operating with this large group is the United States Department of Agriculture.

The great function of the Institute is to disseminate information concerning co-operative marketing methods, as applied in the handling and marketing of the various farm products.

The Staff of the Institute will include outstanding representatives from the wide range of co-operative organizations and from the leading educational institutions of the United States. In addition to these, several international authorities on co-operation and finance will participate in the educational program.

The four weeks' course will embrace the economic principles and legal structure of co-operative organization and membership program, operating methods and manufacturing problems as well as sales policies and price problems.

Dr. Josiah H. Penniman, president of the University of Pennsylvania, in making the announcement that the University had been selected as the place for holding this session of the Institute, said:

"The University of Pennsylvania is happy to place its facilities at the disposal of the American Institute of Co-operation.

"The high cost of distribution is one of our most serious problems and in thus lending assistance to the Institute we are endeavoring to aid in the solution of this problem as applied to marketing of agricultural products.

"Our farmers have suffered because of their failure to devote to the marketing of their products the same care and study given their production. The nation needs a large group of men and women trained in the most modern and efficent methods of marketing."

What the Institute Offers

A course from which members, employees, and officers of co-operative marketing organizations, teachers of marketing in Universities and Colleges, public marketing officials and private and public research workers will be able to secure training. Practical experience and knowledge will be pooled for mutual benefit and the advancement of sound co-operation.

The Institute will serve to clarify through conferences the real goal of co-operative endeavor: to analyze the experience thus far accumulated and to develop leaders and workers who can effectively serve the future needs of the movement.

The topics for study have been developed with the four weeks' session in mind. They are so planned that students who cannot attend the full period may select such groups as best fit their convenience and needs.

Conference groups will make intensive studies of problems relating to specific commodities.

Arrangements will be made whereby those who may be unable to attend for the whole period of four weeks may come to the conferences for shorter periods. Programs as to the various days' activities will be available at a later date.

Topics for Study

FIRST WEEK

Economic Principles and Legal Structure of Cooperation

History of Co-operation.
Ideals of the Movement.

(Continued on page 9)

COW JUDGING DEMONSTRATION
Dairy School at Midway, Delaware

DAIRY SCHOOL AT MIDWAY, DELAWARE

Two Days Session Devoted to the Study of Dairying

The Nassau Local of the Inter-State Milk Producers' Association held a Dairy School at Midway, Sussex Co., Del., on February 17th and 18th, in the Community Hall of the Presbyterian Church.

The first session, on February 17th, was opened with an address by W. E. Thompson, President of the Nassau Milk Producers' Association. Mr. Thompson reviewed the history of the milk producers in that community and their long efforts to obtain a satisfactory market for their output.

"To the Inter-State Milk Producers' Association and to Mr. M. C. Vaughn, our County Agent," said Mr. Thompson, "is due much of the credit for obtaining our market. They, together with a group of progressive farmers in this district, have labored long and faithfully to secure a market. We consider that we are particularly fortunate in having a Grade 'A' market at this point. This gives us not only all the advantages of the Philadelphia price, but the additional premiums resulting from our efforts to produce a higher quality of milk."

A Cow Judging Demonstration was given by Chas. A. Wilson, of the Dairy Council. Mr. Wilson took a typical dairy cow for the demonstration and in a clear and concise manner stated the points we should look for in securing an animal for our dairies.

She should have a strong constitution, as indicated by a large heart girth and ample lung room, together with a large capacity for handling feed, as indicated by well sprung ribs, deep barrel and good length. Her mammary development should be large and well developed, with a good udder and extending well forward and with squarely placed teats.

The importance of having animals developed to their maximum size was stressed by Mr. Wilson at the demonstration.

Following this, a judging contest was held—two classes of animals being provided. The one class consisted of four mature dairy cows in various stages of lactation, and the second class consisted of four heifers.

A prize of five dollars, donated by the Supplee-Wills-Jones Milk Co., was given to the person placing the class best and preparing the best reasons for so placing the animals. This prize was won by Granville Bryan, who scored 137 points out of a possible 200 on his placing and reasons. A second prize of $2.50, donated by the same company, was won by David R. Repper. Honorable mention was given to C. H. Wieland, who ranked third in the placing and preparation of reasons. Great interest was shown in the judging work and the attendance was as large as could be handled adequately.

The evening program on February 17th was given over to community singing lead by T. R. Ingram, together with an address by H. D. Davis, in charge of the Scientific Department of the Supplee-Wills-Jones Milk Co., on "Breeding for Form and Function."

Mr. Davis stressed the importance of breeding up the dairy to a greater production, pointing out that increases in production invariably lower the cost of production in the average dairy. In addition to a good producer, Mr. Davis pointed out, that we should endeavor to breed an animal which is pleasing to the eye, having a true dairy conformation. He added, however, that the important point is to improve our animals to secure greater production.

Dr. V. C. Moyer, Assistant in charge of the Supplee-Wills-Jones Scientific Department, discussed the principles of clean milk production, stating that it was important to observe each detail of clean milk production—such as clean cows, clean dry hands while milking, clean utensils and proper cooling. "To neglect any of these points," said Dr. Moyer, "means a lowering of the quality of the production."

The afternoon session of February 18th was given over entirely to feeding.

H. S. Smith, of the Dairy Council, discussed roughages and their importance in the feeding operations. "Corn silage and alfalfa, clover or soy bean hay form the basis of the best feeding practices," said Mr. Smith. "There is perhaps no

(Continued on page 13)

SIXTH ANNUAL CONFERENCE OF NEW JERSEY CO-OPERATIVES

By R. W. Balderston

The state Department of Agriculture in New Jersey conducted another one of its very interesting conferences on co-operative marketing on February 10th and 11th, 1925. The two-day program was extremely valuable to the large and representative group of New Jersey farmers and farm organization representatives which attended. The conference was opened by an address on the "Opportunities and Limitations of Co-operation" by Dr. E. G. Nourse, Chief of the Agricultural Division, Institute of Economics, Washington. Dr. Nourse emphasized the difficulty of differentiating between the production and distribution of farm crops. When we talk about marketing a product such as potatoes or apples, the question goes back to the selection of varieties with reference to the demand, the spraying and care of the crop so as to get high grade products, and the proper harvesting and so on, including the grading and all the other stages of marketing. He pointed out very emphatically that there are things which co-operation can do for farmers which trade cannot do.

1. It can break through local market restrictions which a single farmer could not do. They can get at terminal markets and can get general market information on which to carry out their business, even if they are not one hundred per cent organized.

2. The co-operatives can take care of time limits in marketing much better than individuals can.

He pointed out that the co-operatives in big leadership, if they are administering the sale of a block of a product large enough to have effect on the price, it takes the skill and strength of salesmanship. The results of such leadership have been more marked in the less highly organized industries,—That is, where previously the marketing had been handled in small unorganized pieces by small individual operators.

On the other hand, Dr. Nourse pointed out that co-operation can work no miracles and that it is not a panacea for all the farmers' ills. He warned those present that it is hard to get a real efficient machine of the co-operative form,—much harder than in the case of large business corporations of the form we have been familiar with for a generation past in other lines of industry.

In conclusion Dr. Nourse pointed out that while he was in favor of and had always supported the idea of a strong contract between the membership and the sales organization, he felt that a co-operative organization had to be more than simply a group of people bound together by an iron-clad understanding to market their products collectively or to purchase their supplies in the same manner. He said there must be a spiritual quality in the co-operative movement, there must be a desire to stick together for the common good, to back up the contract into which all the members have entered. There must be a knowledge on the part of all the members of the obligations and responsibilities of each, as members of the co-operative organization, and all must be aware of the necessity of following out those principles of organization which will be permanently successful. If our farmers cannot learn to carry out their community activities along the lines which promote co-operation,—if our young people are not made to think in terms of co-operation,—then individualistic methods of the members will continue to wreck the co-operative.

The success of the co-operative movement in Denmark,—he pointed out,— was due to the fact that the people of Denmark think and live in a co-operative spirit and the whole educational system of the rural people contained these ideas and ideals.

The very valuable address of Dr. Nourse was discussed by Mr. L. A. Cooley, Manager of the Atlantic Coast Poultry Producers' Association, and Mr. C. I. Cohee, of the Philadelphia Inter-State Dairy Council.

In the afternoon the meeting listened to a very interesting discussion of contracts and finances by Mr. Oliver J. Sands, of Richmond, Virginia. Mr. Sands pleaded for a better understanding between the financial people of the country and the farmers with reference to the particular type of financing that the farmers need. He also told of some of the troubles which the tobacco people in Virginia had in marketing their product during the last few years.

After that Mr. Coulter, Secretary of the Dairymen's League Co-operative Association spoke on the fundamental principles of pooling as it has been worked out by the Dairymen's League and Mr. H. E. Taylor, Acting Secretary of the State Federation of County Boards of Agriculture, spoke on the work which that organization had done in sponsoring co-operative endeavor. In the evening, Mr. Chris L. Christensen, Bureau of Agricultural Economics, Department of Agriculture, gave an illustrated lecture on how the Danish farmers co-operate.

At the meeting held Wednesday, February 11th the first talk on the program was "Merchandising Methods for Farmers," by Mr. T. E .Baum, of the Great Atlantic and Pacific Tea Company,—Mr. J. A. Coulter, Dairymen's League Co-operative Association, and Mr. M. Sondergaard, of the Minnesota Co-operative Creameries' Association. The discussion was opened by Mr. Byron Roberts, of the Jersey Fruit Growers' Co-operative Association.

This was followed by an address on "The Field for Farmers' Purchasing Organizations" by Mr. H. E. Babcock, General Manager of the New York Grange League Federation Exchange, and was afterwards discussed by Mr. C. W. Clemmer, Manager of the Burlington County Supply and Produce Company, Mr. A. B. Lippincott, Manager of the South Jersey Farmers' Exchange, Mr. J. H. Hankinson, of the Mercer County Farmers' Co-operative Association and Mr. George E. Engels, Manager of the Co-operative Growers' Association.

In the afternoon addresses were given on "Methods of Organizing—What Educational Background is Necessary?" by Mr. M. C. Burritt, President of the Western New York Fruit Growers Association, Professor F. B. Bomberger, Director of the Extension Division, Maryland State Agricultural College, Prof. H. J. Baker, Director of the Extension Division of the New Jersey State Agricultural College, and Rev. R. J. Beazley of Jobstown, N. J.

ANIMAL TUBERCULOSIS IN PENNSYLVANIA

Hon. F. B. Willits, *Secretary of Agriculture*

The demand on the part of Boards of Health, throughout the Commonwealth of Pennsylvania, for a tuberculin free milk supply has been steadily becoming more insistent.

After January 1, 1925, a Baltimore, Maryland ordinance shuts out Pennsylvania milk, unless it comes from tuberculin tested animals. This condition affects hundreds of dairymen in York county.

Somewhat similar ordinances in Lancaster and Johnstown, Pa., are forcing tuberculin testing in those territories.

In many counties in southeastern Pennsylvania, it is estimated that reactors will average 25 to 30 per cent. In many instances herds amount to 75 or more cows.

Under the law the maximum indemnity paid is $120 for pure bred and $65 for grade cows, but in no case more than 90 per cent. of the appraised value of the animal. Of this amount the State of Pennsylvania pays $70 for pure breds and $40 for grade cows. These are maximum figures. The Federal government pays the difference between this amount and the estimated value.

In New York State, the amount paid by the State is $120 and $70 respectively, for pure breds and grades, in addition to the amount paid by the Federal government.

Even though indemnity is paid the farmer is burdened with a loss, but he realizes that this is a health program, not only for himself but for the public as well—and to a very large degree, is willing to bear his share of the loss in obtaining a tuberculine free herd.

In the tuberculosis work so far conducted by the Pennsylvania Bureau of Animal Industry it is estimated that about 10 per cent of the one and a half million cattle on Pennsylvania's 202,000 farms are tuberculous and the disease is found on 39 per cent. of the farms. In other words, there are 150,000 tuberculous cattle on 75,000 farms in Pennsylvania.

The eradication of bovine tuberculosis is important to both producer and consumer. Tuberculosis is transmissible from animal to man. Many milk producers already comply with local milk ordinances by having their herds tested and the tubercular cattle eradicated.

Exclusive of Philadelphia and Pittsburg, seventy municipalities with a population of 1,250,000 are enforcing milk ordinances.

The Pennsylvania Department of Health estimates that thirty additional milk ordinances, affecting 500,000 people, will be enacted during the present year. In addition, many Pennsylvania milk producers who sell their milk in adjacent states are required to tuberculin test their herds.

Work Accomplished in Pennsylvania

Approximately 15 per cent., or 23,143 herds, comprising 238,983 cattle, of all the cattle in Pennsylvania are under official supervision for tuberculosis prevention and eradication.

County-wide tuberculin tests have been conducted on all the cattle in Mercer, Crawford and Jefferson counties. Similar work has also been conducted in 48 townships in the following counties, Lawrence, McKean, Columbia, Montgomery, Elk, Butler, Beaver, Clarion, Clearfield and Warren.

In other words, in the above named counties and townships, numbering 136 townships in all, the area tuberculin test has made safe, as far as tuberculosis is concerned, the 35,000,000 gallons of milk produced annually in those areas. This represents 9 per cent of the total annual milk production of the State.

The Demand for Tuberculin Testing

An aggregate of 1200 herds have had the tuberculin test under the Individual Accredited herd plan while 26,000 herds are awaiting testing under the Area Plan. They are in 194 townships located in 25 counties.

Summarizing the number of herds waiting for the test under these two plans, it is estimated that as a result of the tuberculin testing already mentioned, some 17,900 cattle would be condemned for which $896,600.00 state indemnity would have to be paid.

The Bureau of Animal Industry from its observation and information available, together with that obtained from other dependable sources, is led to believe that the owners of 600,000 cattle will want their herds tuberculin tested and placed on the tuberculin free list during the next two years.

In order to satisfy this demand the Bureau of Animal Industry estimates that at least $2,000,000 will be necessary for indemnity purposes during the next two years.

NATIONAL DAIRY EXPOSITION INDIANAPOLIS, INDIANA

Announcement has been made that the Nineteenth Annual National Dairy Exposition, would be held in Indianapolis, Indiana, October 10th to 17th, 1925.

While details are not yet available we understand that the show will be held on the State Fair Grounds, which has eight commodious buildings available including a cattle barn with 2,000 stalls, a large coliseum, steam heated buildings for machinery exhibits, educational exhibit buildings, etc.

NEW JERSEY STATISTICS FROM DEPARTMENT OF AGRICULTURE

The New Jersey Department of Agriculture, has recently announced the compilation of live stock on farms in that state, on January 1, 1925. While the number of dairy cows is slightly larger the value has decreased. On January 1, 1924, reports show 151,000 cows, valued at $85 each, or a total of $12,853,000, while on January 1, 1925, there were 153,000 cows, valued at $75 each, or a total of $11,475,000.

CONCENTRATES

By R. M. Dwyer

Quality Control Department, Philadelphia Inter-State Dairy Council

Concentrates are the grain feeds used to balance the roughage in a ration.

A balanced ration consists of the nutrients required to maintain the body as well as for production of milk of an animal for a period of twenty-four hours without any waste.

The nutrients in a ration are proteins, carbohydrates, fats and mineral matter. If a ration is lacking in any one of the ingredients, it cuts the efficiency of the ration to the extent of the nutrient that is deficient.

A ration may be divided into two classes—roughages and concentrates. Roughages are used principally as the maintenance ration, and concentrates are fed for production.

There are five important factors to be considered in a ration:

Palatability

A feed is said to be palatable when its flavor is pleasing. Feeds like wheat bran, corn meal and ground oats are considered palatable, while certain feeds like cotton seed meal, etc., are unpalatable until the animal has been taught to eat them by mixing them with palatable feeds. The amount of digestive juice which aids the assimulation of feeds depends on the palatability.

Bulk

A grain mixture is bulky when a definite weight takes up a relatively large space. One hundred pounds of wheat bran takes up a larger space than 100 pounds of corn meal, and is said to be bulky—or light. A quart of a properly balanced ration should weigh about one pound.

It is a known fact that bulk in itself enables the digestive juices to more completely penetrate the mass and will facilitate digestion. A dairy cow—to do well—must have the digestive tract very well extended.

If the grain mixture is fed on silage or some other roughage it may, perhaps, be heavier than when fed alone.

Variety

In compounding a grain mixture so that it will have palatability, bulk and be properly balanced, four or five grains may be used in the mixture. This is spoken of as variety in the ration. Care should be taken that grains from distinctly different species of plants should be used.

There are several different kinds of protein found in different plants. This will help furnish the animal with needed mineral ingredients and special forms of protein needed to produce milk.

It is not advisable to feed several different named feeds all coming from the same plant, such as corn stover, corn cob meal, corn bran and gluten feed. These feeds could be mixed to make a balanced ration, but it would not have variety since all the feeds would be from the corn plant.

Effect on Health

Each feed has its own specific effect on the animal's body. Certain effects of particular feeds are well understood, as cotton seed meal is known to be constipating while oil meal has a laxative effect. Some of the roughages are laxative, such as silage, roots, clover and alfalfa hay. Others are constipating, such as timothy hay, oat straw and corn stover.

When roughages are constipating in their effect, a grain mixture of a laxative nature should be used, as the bowels of a dairy cow must be in a laxative condition to prevent impaction, indigestion and to keep her system regulated if she is to make her best production.

Digestibility

In considering feeds there are always two analysis to be considered. One is the amount of nutrients that can be abstracted by chemical processes. The other is the amount of nutrients that can be assimulated by the animal's system during the process of digestion, which is known as the true digestible analysis, and for this reason we should lay more stress on the true digestible than on the chemical analysis of feed.

COST

In successful feeding the business side is very important. Dairymen often believe that the price per ton is the essential consideration.

In feeding for the purpose of producing milk or making large records, cost is not to be considered. The main thought to bear in mind is the low cost of digestive true protein and net energy in feeds.

If two feeds are of the same nature and one is high priced while the other is low in price due to supply and demand, the low priced feed should be substituted for the higher priced feed. For example, consider soy beans and oil meal. These feeds are very similar in nature and analysis. If soy bean meal is being used and is higher in price than oil meal, then oil meal should be substituted for soy bean meal in the grain mixture.

FEED CONTENT

To give milk, a cow must receive in her feed the materials which milk contains. She can't change her milk to fit the feeds.

Protein

The dairy cow uses proteins for hair, hide, horns, hoofs, blood and milk. Feeds that contain a large amount of protein usually cost the most money. Proteins can be transformed into carbohydrates and fats by the nitrogen content being thrown off, but carbohydrates and fats cannot be changed into proteins because they do not contain any nitrogen.

Carbohydrates and Fats

Energy, heat and fat are supplied by carbohydrates and fats in feeds. These two materials keep cow's blood temperature about the same all the time. Carbohydrates are known as the sugars and starches. Fat is known as the oily part of the feeds and is two and one-fourth times more concentrated than carbohydrates. A feed should be rich in fats and carbohydrates, as about sixty-eight per cent. (68%) of the dry matter in milk is made up of fats and milk sugar, the rest being derived from protein and mineral matter.

These ingredients must be provided for in the proper proportion in order for a cow to give the maximum amount of milk.

By an "efficienct producer" we speak of an animal that is capable of producing large amounts of milk in return for the feed she consumes. An efficient dairy animal puts her feed to various uses, such as:

1. Maintenance of her own body.
2. The development of her fetus.
3. Animal growth, in case she is not matured.
4. Body fat during her pregnancy period.
5. The production of milk.

After considering these purposes we readily see the necessity for liberal feeding at all times, keeping in mind certain conditions which are continually changing. They are based on her stage in lactation and pregnancy. The seasons must be considered at the same time, as we receive better results from various feeds in summer and winter.

Oil meal should be substituted for cotton seed meal if constipating roughages are fed. The ration should also be a little higher in protein if legumes are not used.

The protein content of the ration may depend upon the condition of the cows. If the ration is high in protein the cows will consequently lose their surplus flesh with a marked drop in production, although the excess protein will stimulate and cause a larger flow of milk for a while.

Heifers in their first and second lactation periods should be fed more according to production because they are maturing.

Cows that are producing four per cent. milk or higher, should receive one pound of grain for approximately every three pounds of milk.

When cows are on pasture they should receive a lower protein ration, having a constipating effect, due to the laxative nature of the grass.

Protein Feeding

Pasture very nearly affords a balanced ration.

If cows are producing twenty-five pounds daily they should have one pound of grain for every five pounds of milk, the ration not being over fifteen per cent. protein and being high in carbohydrates and fat.

When the cows are dry it is a very good time for them to take on surplus flesh which will enable them to produce very much better after freshening. Ten days before freshening, and a period of five days after, the grain ration may be made up wholly of wheat bran and ground oats, with perhaps the addition of some linseed oil meal, as these feeds are not feverish and the bran will act as a regulator on the system.

A set of scales and a record sheet should be used in every dairy stable, as it is very necessary for economic production to feed according to the daily production.

THE DAIRY OUTLOOK FOR 1925

United States Department of Agriculture

Further expansion in Dairying in 1925 seems inadvisable. A recovery in prices of dairy products could hardly be expected should the number of milk cows be further increased. In addition to the fact that domestic production appears adequate, the foreign dairy situation is such as to keep world market prices low and thus limit the height to which our butter prices can rise without bringing in foreign butter.

The marked expansion of dairying in the principal butter sections shown by the increase of 4.2% in the estimated number of milk cows in that area during 1924 as compared to a 2.2% increase for the whole country, was largely caused by the unfavorable returns from other farm enterprises since the war. The slight decrease in the number of milk cows in the northeastern states and the upward trend in fluid milk consumption leaves producers in this section in somewhat better position than last year, though faced by higher grain costs this winter.

Beginning the year 1924 with an increase in estimated number of milk cows on farms of but 1.4% over January 1, 1923, production increased fully 3% during 1924, due to the unusually favorable weather and pasture conditions during the flush season, resulting in the low butter prices which prevailed the second half of the year. With most of this increase in production diverted into butter, production of butter increased approximately 8% over 1923. This heavy production was reflected in the accumulation of stocks in storage which on September 1 reached a peak of 156,440,000 lbs. Under the influence of these conditions butter prices did not follow the usual upward tendency during the late summer and early fall months. Low prices prevailing since the middle of 1924 have stimulated consumption and reduced production. The out-of-storage movement has been sufficiently heavy to indicate that the surplus will probably be disposed of by the end of the storage season.

Domestic consumption should continue heavy in 1925 as favorable industrial conditions throughout most of the year are expected, and because of the tendency toward heavier per capita consumption of milk and dairy products stimulated by advertising and educational work.

European demand for dairy products can not be expected to improve in the near future as it did during the past year. The United Kingdom is now consuming more heavily than in pre-war years. Germany, too, is already fully back to pre-war volume of butter imports, the recovery of imports in that country having taken place within the past year, exerting an unusually strengthening influence upon world markets, and offsetting the effect of heavier world production. Southern hemisphere countries, including New Zealand, Australia, and Argentine where dairy production is now exceeding all previous records, are to be regarded as important influences in the worlds butter markets during the coming year and increasingly in the future.

While 1924 may not have been as profitable a year for dairying generally as was 1923, those who have recently gone into the dairy business would do well not to abandon it because of a single year of higher returns from other farm enterprises. Weeding out the least efficient cows and feeding more carefully would help to meet the present situation, and still leave the farmers of the country in good position to meet the steady growth in the demand for dairy products which each year is showing.

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Editorial

It is with great interest that we note that in the House of Representatives at Washington, the Capper-Haugen Co-operative Marketing Bill was finally defeated by a vote of 203 to 175 and an entirely new bill, the Norris-Dickinson Bill, was substituted for it.

The Capper-Haugen Bill, although prolifically amended, was still believed to be extremely dangerous to co-operative marketing in many respects. It provided for a Board of uncertain possible formation as to personnel. It gave this Board very wide powers.

It divorces from the Department of Agriculture the duty of aiding agricultural co-operative marketing. It provided for registration and audit for co-operatives of the country under conditions that were believed to be extremely detrimental. No group of American business is being subjected to the kind of control that this bill provided.

The proposed Norris-Dickinson Bill provides for a Board to be nominated by representatives from the co-operative associations of the country, eliminating the registration provisions which were an objectionable feature of the Haugen Bill. This substitute bill has the united support of the large agricultural co-operatives of the country, including all the units of the National Co-operative Milk Producers' Federation.

BEWARE OF GARLIC

Milk producers should use every precaution to avoid garlic or other objectionable flavors in their milk.

Consumers object to such flavors and restrict their use of milk when they are present.

To protect their markets, dealers refuse to accept milk with these objectionable flavors.

A little precaution and care in turning cows on early grass may correct this difficulty.

AMERICAN INSTITUTE OF CO-OPERATION

Announcement has been made that the American Institute of Co-operation, an educational program in which the National Co-operative Milk Producers' Federation has been very active in the development work, will be held, during the coming summer, at the University of Pennsylvania in Philadelphia.

The four weeks' session will enable those interested in the co-operative movement of farm products, to study fully the complete phases of the different branches of the industry in which they may be particularly interested.

The Institute will include the presentation of co-operative development, in the various fields of agriculture, not only in this country but also its development abroad.

Everyone interested in the development and forward movement of agricultural co-operation should avail themselves of the opportunity to participate in this study, details of which are given on another page of this issue of the Review.

A PINT OF MILK

"A pint is a pound the world around," is a poor rule to follow when milking. Even a quart of water weighs more than two pounds and a quart of milk weighs more than water, points out F. C. Button, professor of dairy management at the New Jersey State College of Agriculture. Neglect of this fact means a loss of dollars to the seller.

The standard quart of milk of average composition weighs 2.153 pounds. Hence, a 40 quart can of milk weighs 40 times 2.153, or 86.12 pounds.

A certain farmer was delivering an average of 8 cans of milk a day, or 240 cans a month, to a New Jersey milk plant. He was paid on the basis of 80 pounds per can—a loss of 6 pounds a can. The milk tested four per cent. fat and was sold by him for $3 per hundred pounds. It can readily be seen that this "short-weighing" of six pounds on each can amounts to 1440 pounds on a month's delivery of 240 cans. With milk selling at three cents a pound ($3 per cwt.), his total loss for the month was $43.00. Here is a case where adherence to the old adage of a "pint's a pound" was costly to the farmer.

In some plants where milk is bought by the can and later converted to a weight basis, 2 1-8 pounds is used as the weight of a quart and 40 quarts are credited as 85 pounds. This, it is claimed, allows for shrinkage or any loss in not having full cans. In no case, however, should a farmer be led to believe that forty quarts of milk weighs only eighty pounds.

Editor's Note.

There is another angle to this situation. Producers should not be too prone to make claims for shortages when cans being used are not in good repair. Too often dented cans are used to ship milk with the result that the weight or quantity of the contents is below the rated full capacity of the can.

The usual 46 quart can, used for the general shipment of milk, has a capacity of 98.90 pounds of milk and not 100 pounds as generally considered. When such cans become dented the capacity is just so much less.

BOARD OF DIRECTORS

The board of directors of the Inter-State Milk Producers' Association held its regular meeting at the association headquarters on Friday, February 27th, which was attended by all but two members of the board.

Following the transaction of routine business and reports covering the various activities of the organization during the past two months, a large amount of general business was transacted.

R. W. Balderston, secretary, made a detailed report of legislative matters, both nationally and in the various states, where the legislatures have been in session. He also made a detailed report of the program of the American Institute of Co-operation, to be held at the University of Pennsylvania, this summer.

H. D. Allebach, president, outlined the developments of the Rural Electric Service Committee, in connection with satisfactory electric rates for use of current in rural sections of Pennsylvania.

Robert F. Brinton, treasurer, presented a statement of the association finances as of the present date and the expenditures of the officers since the last meeting of the board of directors, which was approved.

A formal resolution was presented proposing a change in the method of selecting the date of the annual meeting of the association. This resolution was presented so that it might be possible to so arrange this annual meeting so that it might not conflict with meetings of other organizations, which many of our members found it necessary to attend on the usual date on which the meetings have been formerly held.

Present bylaws and the proposed change is as follows:

Article Five

(which reads as follows)

5. The annual meeting of stockholders shall be held on the first Monday of December in each year if not a legal holiday, and if a legal holiday, then on the day following, at ten o'colck A. M., when they shall elect by a plurality vote, by ballot, directors to fill vacancies then existing in the Board to serve for the term of the class to which they may be elected.

(to be amended to read)

5. The annual meeting of stockholders shall be held between the fifteenth day of November and the fifteenth day of December in each year. The Board of Directors shall select the exact date and hour and shall notify the stockholders, either by mail or through the Inter-State Milk Producers' Review, of the date of such selection, such notification to be made at least sixty days in advance of the date so selected.

Should the Board of Directors not select any particular date during the period above mentioned and notify the stockholders accordingly the annual meeting shall be held on the first Monday in December of each year if not a legal holiday and if a legal holiday on the day following at ten o'clock, A. M. At said annual meeting the stockholders shall elect by a plurality vote, by ballot, directors to fill vacancies then existing in the Board to serve for the term of the class to which they may be elected, and shall transact any other business that may properly come before the meeting.

Frank M. Twining, in charge of testing work, made a very complete report on the work accomplished by the department during the month and outlined the program of testing as well as organization work in the near future.

Hon. F. P. Willits, secretary of agriculture for the Commonwealth of Pennsylvania, outlined the proposed program of Tuberculosis Eradication in Pennsylvania during the coming two years and assured the directors that an appropriation of at least $2,000,000 would be necessary by the state legislature if the proposed program were carried out.

Detailed reports of conditions in the districts of the various directors were presented by each member of the board present and indications on the whole were that field conditions were generally satisfactory to the membership at large.

C. I. Cohee, director of the Quality Control Department of the Philadelphia Inter-State Dairy Council, made a very complete report as to the activities of that department. With a very few exceptions, first inspections have been made on the farms of all producers shipping milk to co-operating dealers. Second and final inspections of the farms are now under way and will be pushed rapidly as soon as weather conditions permit.

H. D. Allebach, president, made a detailed report as to general market conditions. Production, on the whole has increased but this has partly been taken care of by increased consumption. The butter market has been more or less irregular for some months and has had an unfavorable influence on the market situation.

MEETING OF TESTING DEPARTMENT

A meeting of the field testing and organization department of the Inter-State Milk Producers' Association, was held in its headquarters, in Philadelphia on Saturday, February 28th.

Reports of the work carried out during the last two months were discussed and plans presented for more efficient work in both branches of the department's activities.

Addresses were made at this meeting by R. W. Balderston, H. D. Allebach and Frank M. Twining.

QUALITY CONTROL DEPARTMENT HOLD FIELDMENS' MEETING

On Saturday, February 28th, the fieldmen of the Quality Control Department of the Philadelphia Inter-State Dairy Council, held a general meeting for the discussion of various plans for the future guidance of the field work.

Detailed reports were presented by the various field representatives and the spring programme of field work outlined and discussed.

FARM WAGES AND LABOR SUPPLY

The average wages being paid for farm labor at present (January 29th, 1925) in New Jersey, is estimated as follows: By the month with board $44.00 as compared with $45.00 last year; by the month without board, $65.00 as compared with $70.00 last year; by the day with board, including piecework, $2.45 as compared with $2.70 last year; by the day without board, including piecework, $3.40 as compared with $3.70 last year.

The supply of farm labor at present is estimated at 90 per cent of a normal, and the demand at 88 per cent of a normal, making the potential supply about 102 per cent of a normal, as compared with a potential of 100 per cent on December 1, 94.3 per cent on November 1 and 97.8 per cent on October 1, 1924.

Reports of the United States Department of Agriculture, under the date of March 1924, show that there were 10,160 farmers' business organizations reported at that time. Of this number 1,966 associations handled dairy products.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1925. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1924.

Beginning with January, milk will be paid for by co-operating dealers on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount, will be paid for on the average New York, 92 score butter, solid pack, price for the month, plus 20 per cent. Milk in excess of the amount equal to the basic quantity will be paid for on a flat average New York, 92 score, solid pack, butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk brought from other producers at price listed thereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk brought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stablization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

FEBRUARY BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

FEBRUARY BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Basic Quantity Miles	Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.23
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.16
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

JANUARY SURPLUS PRICE
F. O. B. Philadelphia

Test per cent.	Class I Per 100 lbs.	Class I Per qt.	Class II Per 100 lbs.	Class II Per qt.
3.	$2.09	4.5	$1.76	3.75
3.05	2.11	4.5	1.78	3.8
3.1	2.13	4.55	1.80	3.85
3.15	2.15	4.6	1.82	3.9
3.2	2.17	4.65	1.84	3.95
3.25	2.19	4.7	1.86	4.
3.3	2.21	4.75	1.88	4.
3.35	2.23	4.8	1.90	4.05
3.4	2.25	4.8	1.92	4.1
3.45	2.27	4.85	1.94	4.15
3.5	2.29	4.9	1.96	4.2
3.55	2.31	4.95	1.98	4.25
3.6	2.33	5.	2.00	4.3
3.65	2.35	5.05	2.02	4.3
3.7	2.37	5.05	2.04	4.35
3.75	2.39	5.1	2.06	4.4
3.8	2.41	5.15	2.08	4.45
3.85	2.43	5.2	2.10	4.5
3.9	2.45	5.25	2.12	4.55
3.95	2.47	5.3	2.14	4.6
4.	2.49	5.35	2.16	4.65
4.05	2.51	5.4	2.18	4.65
4.1	2.53	5.45	2.20	4.7
4.15	2.55	5.45	2.22	4.75
4.2	2.57	5.5	2.24	4.8
4.25	2.59	5.55	2.26	4.85
4.3	2.61	5.6	2.28	4.9
4.35	2.63	5.65	2.30	4.95
4.4	2.65	5.7	2.32	5.
4.45	2.67	5.7	2.34	5.
4.5	2.69	5.75	2.36	5.05
4.55	2.71	5.8	2.38	5.1
4.6	2.73	5.85	2.40	5.15
4.65	2.75	5.9	2.42	5.2
4.7	2.77	5.95	2.44	5.2
4.75	2.79	6.	2.46	5.25
4.8	2.81	6.	2.48	5.3
4.85	2.83	6.05	2.50	5.35
4.9	2.85	6.1	2.52	5.4
4.95	2.87	6.15	2.54	5.45
5.	2.89	6.2	2.56	5.5

JANUARY SURPLUS PRICE
At Receiving Stations

Test	Class I per 100 lbs.	Test	Class II per 100 lbs.
3.	$1.51	3.	$1.19
3.05	1.53	3.05	1.21
3.1	1.55	3.1	1.23
3.15	1.57	3.15	1.25
3.2	1.59	3.2	1.27
3.25	1.61	3.25	1.29
3.3	1.63	3.3	1.31
3.35	1.65	3.35	1.33
3.4	1.67	3.4	1.35
3.45	1.69	3.45	1.37
3.5	1.71	3.5	1.39
3.55	1.73	3.55	1.41
3.6	1.75	3.6	1.43
3.65	1.77	3.65	1.45
3.7	1.79	3.7	1.47
3.75	1.81	3.75	1.49
3.8	1.83	3.8	1.51
3.85	1.85	3.85	1.53
3.9	1.87	3.9	1.55
3.95	1.89	3.95	1.57
4.	1.91	4.	1.59
4.05	1.93	4.05	1.61
4.1	1.95	4.1	1.63
4.15	1.97	4.15	1.65
4.2	1.99	4.2	1.67
4.25	2.01	4.25	1.69
4.3	2.03	4.3	1.71
4.35	2.05	4.35	1.73
4.4	2.07	4.4	1.75
4.45	2.09	4.45	1.77
4.5	2.11	4.5	1.79
4.55	2.13	4.55	1.81
4.6	2.15	4.6	1.83
4.65	2.17	4.65	1.83
4.7	2.19	4.7	1.87
4.75	2.21	4.75	1.89
4.8	2.23	4.8	1.91
4.85	2.25	4.85	1.93
4.9	2.27	4.9	1.95
4.95	2.29	4.95	1.97
5.	2.31	5.	1.99

MARCH PRICES
F. O. B. Philadelphia
Country Stations

The same prices for basic milk as quoted above for February apply in March, subject however, to change whenever warranted by market conditions.

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37
November	6.3	2.37
December	6.3	2.37
1925		
January	6.3	2.37
February	6.3	2.37

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—*Roosevelt.*

Buy Federal Land Bank Bonds

BUILDING A MORE PROSPEROUS AGRICULTURE

MORE THAN 300,000 farmers are improving their farms and paying off their mortgages through the aid of Federal Land Bank Loans. They enjoy easier terms and lower interest rates. These helpful loans are made by the twelve Federal Land Banks, with combined assets of nearly $1,000,000,000. More than $45,000,000 of their capital stock has been supplied by active farmers through their farm loan associations.

Thus the twelve Federal Land Banks, with their more than 4,600 local national farm loan associations, make up the farmers' own borrowing and investment system, operating under Government supervision.

To provide funds for loaning, the Banks issue Federal Land Bank Bonds, secured by first mortgages on approved farms valued by Government appraisers at not less than double the amount of the mortgages. Every Bond is guaranteed jointly by *all* the twelve Federal Land Banks with combined capital and reserve exceeding $50,000,000. These Bonds are everywhere recognized as a standard investment security.

Every farm family can share in the benefits of this mutual system by owning Federal Land Bank Bonds. A beginning can be made with a single Bond. Denominations are $40, $100, $500, $1,000, $5,000 and $10,000. Coupon or registered form. Interest will be promptly paid twice yearly, and the principal when due. Both interest and principal are tax-free, inheritance taxes only excepted. If desired, the Bonds can be quickly sold for cash or used as security for a loan.

Federal Land Banks are located at

Springfield, Mass.	St. Louis, Mo.	Louisville, Ky.	Columbia, S. C.
New Orleans, La.	Berkeley, Cal.	St. Paul, Minn.	Houston, Texas
Wichita, Kansas	Omaha, Nebr.	Baltimore, Md.	Spokane, Wash.

Write for Federal Farm Loan Board Circular No. 16 descriptive of these Bonds, addressing nearest Federal Land Bank or the Fiscal Agent.

Fiscal Agent

FEDERAL LAND BANKS
Washington, D. C.

JANUARY BUTTER PRICES
92 Score, Solid Packed

	Philadelphia	New York	Chicago
2	41	40 1/2	39
3	41	40 1/2	38 3/4
4	41	40 1/2	38 1/2
5	41	40	38 3/4
6	41	40	39
7	40 1/2	39 1/2	38 1/2
9	—	39 1/2	—
10	40	39	39
11	40 1/2	39 1/2	39
13	41 1/4	40 1/2	40
14	42	40 3/4	40 1/2
16	42 1/2	41 1/2	40 1/2
17	42	41	41
18	42	41	41
19	42	41	40 1/2
20	42	41	40
21	42	41	40
24	42	41	40
25	42	41	40 1/2
26	43 1/2	42 1/2	42
27	—	43	—
28	—	44	—

HAVE TOOLS READY

The degree of success in home gardening and also the amount of pleasure derived from working in the garden is largely determined by the kind of tools used. The variety of labor-saving hand tools is large and they are inexpensive. Now is the time to look over the equipment of tools on hand and repair them if necessary. In selecting new tools praticular soil conditions should be kept in mind as all tools will not work under all conditions. If your garden is one-fifteenth of an acre or larger in size you should have a hand wheel hoe.

TESTING BY AREA PLAN PROVES EFFECTIVE

Figures compiled by the Pennsylvania Bureau of Animal Industry show conclusively the effectiveness of the area plan by which tuberculosis is being eradicated from Pennsylvania herds. In Mercer county, for example, a total of 32,887 cattle were given the first test and 839 reacted or 2.5 per cent. On second test only 206 animals re-acted in a total of 32,722 which is .79 of one per cent. In other words, the percentage of disease in approximately 33,000 head of cattle was reduced by one test from 2.5 per cent. to .79 of one per cent. It is certain that at the present time after the second test less than one-half per cent. of the cattle in Mercer county are infected with tuberculosis.

In Crawford county, the first test on the area plan revealed 1,247 re-actors out of a total of 47,084 head or 2.6 per cent. On second test only 396 animals out of a total of 48,328 re-acted which means a reduction in tuberculosis infection from 2.6 to .8 of one per cent.

Mercer County					
1st test	4,383	32,887	368	839	2.5
2nd test	4,588	32,722	123	260	.79
Crawford County					
1st test	5,114	47,084	545	1,247	2.6
2nd test	5,618	48,328	225	396	.8

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Just the Thing for Every Housewife

Containing methods of using the health-protecting foods, milk and its products, fruits and vegetables

"Health Receipts" has thirty-six colored illustrations, and contains more than one hundred and seventy-five receipts in addition to seasonal menus.

A valuabe recipe book for the home kitchen. Useful also for teachers of cooking and home making. It is so arranged that it may be retained as a complete book, or separated into forty-five cards to fit into a standard size recipe box file.

Special Price to Inter-State Milk Producers' Association Membership

25c Postpaid

GET YOUR ORDER IN NOW

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING

1211 Arch Street

PHILADELPHIA

GARLIC

By C. I. Cohee

Just as soon as the snow is off the ground, and even before the roads dry up after the snows leave the ground in the spring, the milk buyer begins to worry about garlic.

Cows are eager for the first taste of green food after the winter months and the dairymen in many sections seem especially anxious to get the cows out on green pasturage. The result has been in previous years—and undoubtedly will be again this year—garlic flavored milk.

Many years of constant efforts to eliminate garlic flavor from milk emphasizes the importance of prevention in this respect. It is impossible to eliminate the garlic flavor after the milk has once been affected, and in prevention lies the only remedy for garlicy milk.

Every effort should be made to carry the cattle along on winter feeding until after the grass obtains a good start in the spring months. Where, through shortage of feed, it is necessary to turn the cows out in the very early spring, great care must be exercised to prevent garlic flavored milk by bringing the cows off pasture several hours before milking.

It is a good practice, when first turning out on early pasture, rye, wheat or other green feeds in fields that are invested with garlic, to begin by pasturing only one hour after the morning milking and then returning the cows to the yard or stables and feeding of hay, corn stover or other roughages. If no noticeable taint is contained in the milk the successive milking, the pasturing period be extended the next day.

Great care should be taken, howe to stretch out over a period of from to three weeks the change from st feeding to full pasturage, and in m cases even a longer period will be quired to make the change without ger of contaminating the milk eithe garlic or other obnoxious flavors.

The consumer of milk objects to fla that may be derived from grass, g rye, wheat, and practically all of green pasturages where the chang made too suddenly from stable fee to pasturage.

Conditions will vary from one far another and from one district to anot The problem of preventing bad flavo the milk is one that rests with individual dairyman.

Make every effort to safeguard aga trouble by being sure that you enter pasturing period so gradually that cannot distinguish bad flavors in milk that you can use on your own ta If you can detect flavors in your milk supply, you may rest assured the buyer of milk will find objectio it.

Now is the time to plan your rotation so as to provide yourself ample feed—thus avoiding the nece of pasturing unduly early in the sp of the next year.

Safeguard your market by elimina garlic and other objectionable fla from your milk.

NEW JERSEY HOLDS COWTESTING CONFERENC

On February 9th, the county agents and cowtesters in the eight counties of New Jersey where cowtesting associations are in operation met at the State Agricultural College at New Brunswick to discuss testing problems. The program was as follows:

Solving Everyday Problems in Testing, Professor J. W. Bartlett.

Some Studies in the Variations in Butterfat Tests, Professor F. C. Button and Mr. G. I. Ball.

The Relation of the Cowtester's Work to the Dairy Program in the County, Chas. A. Thompson, County Agent.

The Dairy Records as Extension Material, H. J. Baker, Director of Extension.

Some Things I Learned as a Cowtester, Howard Mason, County Agent.

How I Keep the Members Interested, Lester Barrett and W. L. Spencer, Cowtesters.

The Value of Properly Summarized Yearly Records, E. J. Perry, Specialist in Dairying.

The testers reported that with the present high prices of feed no mediocre cow could pay her feed bill and that only those cows considerably above the average were showing any profit. It was felt that the yearly milk and feed records on the three thousand or more cows are not only revealing the very best and poorest milkers, but these records are affording splendid evidence of the comparative values of certain feeds when used under average farm conditions. The "checking up" of the worth of the bulls by the members was also considere be one of the valuable functions of associations. A study of figures mitted by Professor Button and Ball furnished those present with deta information regarding the extent which daily milk samples vary monthly composite samples. It shown that while a cow's test va only slightly from year to year and a long period of time, the one day each month cannot be expected to c cide with every composite test made a fifteen or thirty day period.

In the discussion the association te was considered to be a right hand to the county agent in his effort to c out a dairy program suited to the c ties needs. Off-times a testing asso tion will uncover problems that were known to exist prior to the formatio the association. In the discussi records it was agreed that less yearly records mean very little to herd owner or to the man who sta them to ascertain the value of cer practices.

The cowtesters who are supervising record associations in which 3,200 are now being tested in New Jersey Lester Barrett, Hunterdon County; ward Phillips, Sussex County; Wa A. Huston, Sussex County; Andrew guson, Burlington County; Dwight Downs, Warren-Morris Counties; iam L. Spencer, Salem-Cumberl Gloucester Counties; L. M. Kie Mercer County.

Mention the Milk Producers' Review When Answering Advertisements

We Guarantee Clean Milk

Because~ The Surge is so easy to wash ~ and when washed is absolutely clean

PINE TREE SURGE MILKER

PINE TREE MILKER — The Cow's Adopted Child

YOU can see at a glance why we can guarantee clean milk with the Pine Tree Surge. There are no long tubes to keep clean – no claws to wash. The whole unit can be taken apart in 20 seconds — and washed in a jiffy. It is so easy that even a hired hand will do it *right.*

We guarantee that the Surge will produce milk that will meet the strictest requirements—anywhere—and do it in the average barn, under average conditions, without any fancy equipment. That means *you* will be able to earn the highest premiums paid for low bacteria counts. It takes a clean machine to produce clean milk. Any machine *can* be kept clean, but to wash other machines *properly* uses up most of the time you have saved by machine milking. Not so with the Surge! It saves more time and labor than any other milker — and at the same time produces milk that will pass any inspection — anywhere.

Don't buy any milker until you have tried taking it apart—washing—and putting it together again.

The Surging Action Milks All Cows Better—

See it "Surge" and you will realize that here is an entirely new idea in machine milking. It milks cleaner and quicker—milks cows no other machine *can* milk.

It leaves the teats and udders in perfect condition—always. The *surging action* does it. Many breeders who never before allowed a milking machine on their cows, are now enthusiastic users of the Surge. We can prove to *you*, just as we did to them, that this wonderful method has positively revolutionized machine milking. *Don't buy any milker until you see what a wonderful job of milking the Surge will do.*

Mail Coupon for FREE Demonstration Offer

If you are the first man in your community who takes advantage of this offer, we will give you a free demonstration on your own cows. We will install a complete Pine Tree Surge Outfit in your own barn. We will show you how easy it is to produce clean milk. We will milk every cow in your herd better than she has ever been milked before. After that, you decide. If you are not thoroughly convinced that you can do for yourself what we have done for you, the outfit will be taken out without one cent's expense to you.

Mail the coupon at once. Get full details of this great offer. You are not obligated to do a thing but consider the proposition we have to make you.

PINE TREE MILKING MACHINE CO.
Dept. 26-93 118 North Warren Street, Syracuse, N. Y.
2843 West 19th Street CHICAGO — 750 North Washington Ave. MINNEAPOLIS, MINN. — 2445 Prince Street BERKELEY, CAL.

Easy Terms:

Any man who wants to buy a Pine Tree Surge Outfit after our free demonstration, can make a deal to pay for it on very easy terms. We'll figure with you to keep the cost down by using any equipment you may have already installed in your barn. You'll be surprised how little it'll amount to. Fill in the coupon and mail it right now. It doesn't obligate you to do a thing but listen to the proposition we have ready to make you. Mail coupon now!

Pine Tree Milking Machine Co., Dept. 26-93
118 N. Warren St., Syracuse, N. Y.

Please send me, without cost or obligation, your special offer on the Pine Tree Surge Milker.

I milk ..... cows.

I have electricity. Current..... Voltage..... .....

I do not have electricity. (Cross out the one which does not apply.)
(The Pine Tree Vacuum System operates on one-fourth of the horsepower required by most systems. Our electric pump can be run on the current from any farm lighting plant.)

Name.....

Address.....

R.F.D......

TIGHT BINDING

INTERNATIONAL Special Dairy Feed is a GUARANTEED Extra Milk Producer

And Thousands of Dairymen Have Proved It!

Stop experimenting! Put your herd on a *proven* milk maker. If you want *more* milk, and at *less cost*, International Special Dairy Feed is your one best buy. One dairyman, with 16 cows, says that he increased his milk check $87 in 30 days by using Special Dairy instead of another feed, costing the same price. $87 a month is over $1,000 a year! Remember: no more feed, no more expense! Special Dairy was the complete answer.

The Secret of More Milk is simple if you use Special Dairy. Protein, molasses and fat scientifically processed and combined in proper proportions provide the necessary nutrients and energy for maximum milk production. This great feed is digestible—cows eat it readily. You can bank on 20 extra quarts of milk from every sack of Special Dairy Feed as compared to using wheat feeds or ground grains. We guarantee this increase has been secured in hundreds of actual tests.

Try a Ton! Do what thousands of other dairymen have done. Make a test on your own herd. That will prove to you that International Special Dairy Feed is the best feed on the market—best for your cows—best for your pocketbook. See your local dealer today and start making extra milk profits right away.

INTERNATIONAL SUGAR FEED CO.
Minneapolis, Minn.
Mills at Minneapolis and Memphis

Live Agents Wanted

With 2% Bone-Building Material

FREE

Write for a copy of our great book, "Feeding the Dairy Cow for Profit." It will pay you well.

Get Those 20 Extra Quarts

FARMERS!

Don't Wait Until April 1

Arrange your Spring Financing NOW!

"THE MORTGAGE THAT PAYS ITSELF OFF"

Enables you to lift the mortgage coming due or borrow money to purchase farm or make improvements. Loan pays itself off by small semi-annual payments running 5 to 33 years.

Operating in Pennsylvania and Maryland

Write for folder explaining plan in detail

THE Pennsylvania Joint Stock Land Bank
Franklin Bank Building
1416-D. Chestnut Street, Phila., Pa.
Under supervision of the U. S. Government

COW CLEANER

Removes the afterbirth of cows and heifers without injury and without force. An afterbirth retained will ruin your cow for the season. Assist nature by giving Dr. David Roberts Cow Cleaner

BEFORE THE COW FRESHENS

For sale by dealers or postpaid $1. Ask for FREE copy of The Cattle Specialist and how to get The Practical Home Veterinarian without cost.
Veterinary Advice Free

Dr. David Roberts Veterinary Co.
153 Grand Ave., Waukesha, Wis.

Unadilla Silos are Dependable

Dairy owners know from *experience* that Unadilla Silos will *keep* their silage in the best possible condition. They *know* they can depend on their Unadillas *year* after *year*, because of their *sturdy* construction. They are *air tight, water tight, frost resisting* and *weather defying*.

Get All The Facts!

Our *big handsome* catalog telling all about silos and giving complete information as to the *time* and *money saving features* of the Unadilla sent *free* upon request. Also complete information about the

Time Payment Plan

And the liberal discounts offered for cash and early orders. Save money and still get the silo that is used by more dairy owners in the east than any two other makes combined.

Don't overlook this opportunity—write today

UNADILLA SILO CO.
Box D Unadilla, N. Y.

UNADILLA SILOS

More Money from Clean Milk

Milk consumers are demanding that every particle of dirt, dust, etc. be removed from milk before it is sold. This demand affects your sale of milk. You can't possibly remove all the dirt from milk with an ordinary wire screen strainer, no matter how fine the mesh. The only way to get perfectly clean milk—and a better price for it—is to use the—

DR. CLARK'S MILK PURITY STRAINER

Sterilized cotton pads tightly clamped to bottom of strainer, completely remove every particle of dirt, dust, and barnyard accumulation. Only strainer on market guaranteed to do this or money refunded. Used and endorsed by Agricultural Colleges, Dairy Inspectors, Borden's, Van Camp's, Carnation, Mohawk and thousands of farmers.

Use Purity Strainer and get top-notch prices for your milk! Send for free illustrated folder and prices. Write today.

PURITY Cotton Discs made in any size from 5½ in. to 7 in. diam., for all makes of strainers or filters. Send for a trial order.

PURITY STAMPING CO., Dept. F Battle Creek, Mich.

FOR SALE
SECOND CROP
IRISH COBBLER Seed Potatoes
Good, Clean
Grown from Certified Seed
ASHER B. WADDINGTON
Woodstown, R. 1 New Jersey

Mention the Review

INVENTORY SEASON FOR ORGANIZERS

C. C. COOK

The taste of old fashioned winter weather which the Philadelphia Milk Shed has experienced during the last two months has made it impossible to do any organized drive membership work. During the periods in which the weather man has relented enough to allow the gasoline to flow without freezing some organization work has been done. Norristown, Pennsylvania, provided a good healthy quota of new members. About twenty-five (25) new members were turned in later from the vicinity of Trenton, New Jersey and the herds averaged nearly 10 cows, or a total of approximately 250 cows. This work was done in a very well organized section. Some new members were also reported from Easton, Maryland.

Through the dull season plans are being laid for membership work during the coming year. The summary of our growth during the past year has been very encouraging and has contained a significance that is not apparent on the surface. It is often pointed out to us that co-operatives and the co-operative movement were developed from necessity rather than foresight. In practically every case farmers have organized because they had to do it to meet rapidly changing economic conditions. Therefore, it is possible to trace in the history of most of our outstanding marketing organizations the two distinct phases: a vigorous lusty growing youth, and a sober, forward-looking maturity.

In the case of an organization which has grown quickly (because of necessity) the end of its youth and the approach of maturity is a critical period. It is noticeable that our association has matured within the last two years. Our milk market has been definitely established as one of the best in returns. The protective service provided dairymen by the Inter-State Milk Producers' Association has become a model for outside use. The co-operative advertising of farmer and distributor through the Philadelphia Inter-State Dairy Council has attracted national attention. For what is probably the first time a large organized group of farmers have taken steps, through the Sanitary Regulations to improve the quality of their product without urging from outside agencies. These items have been features of our transition from youth to manhood. Our membership has passed through a similar phase.

During the hearty youth when the entire territory was open for organization and community leaders recognized the great need for it, membership work was largely group work and everyone lent a hand. Meetings would result in large additions to the roll and localities where market conditions were poor joined almost as a body. But as this young period drew to a close, maturity presented us an aspect of retrenchment and a necessity for standing on our own feet. Then definite policies had to be adopted to provide for that slow, persistent, day-by-day field canvassing which would not only maintain the membership already gained, but increase it slowly and surely. Organization in the early years, was fast and furious, with an eye on a goal. In the last two years membership work passed through the period of adjustment to steady, methodical progress. We have been particularly fortunate in our transition stage in membership. Rather than the abrupt stop in growth which might be expected at the end of the youthful period we have enjoyed a steady increase. As group additions to our rolls became more scarce individual additions have grown tremendously due to the house to house canvassing of fieldmen. Plans for future organization work are being laid with an increasing precision because of the realization that as our membership increases the difficulty of adding new members increases.

In the winter, the farmer's inventory season, it is appropriate that we give some consideration to our next year's enterprises as a whole. We would like to emphasize the membership work of this organization as one of the problems which should be in the mind at least at intervals of every member on our rolls.

In the hands of each individual who is supporting the Inter-State Milk Producers' Association is placed the keeping of a successful, mature co-operative marketing venture of national importance. It must be the dairymen members' responsibility that our growth be one of sober and constructive progress. We are asking the aid and encouragement of everyone of our members in this year's membership work in the field.

SHIPPING MILK BY AIR

Down in Florida there is a man who is experimenting with a big herd of cows and shipping milk each morning by airplane to cities in Alabama.

The great glass lined refrigerator tank cars which have been installed on a few railways promise to bring fresh milk from mid-eastern farms to New York City daily.

By and by somebody will think up a way to shoot milk by wireless or radio from a California dairy to a breakfast table, down in Long Island.

When this happens, dairymen, who are producing milk at give away prices in our eastern states, will, of very necessity, have to go into some other business to keep on living as they have accustomed themselves.

"The Dairy Reporter."

PENNSYLVANIA STATE GRANGE

The Pennsylvania State Grange has announced its position on National Legislation and has indorsed the recommendations of the Agricultural Conference as outlined in its preliminary report. Giving its position, it urges:

"Enactment of a proper truth in fabrics bill.

"Adequate appropriations for agricultural experiment stations.

"The proper regulation of freight rates.

"The same tariff protection for agriculture as is recorded to industry and labor.

"The granting of the broadest powers to farmers' co-operative marketing and purchasing organizations free from governmental interference and control.

"Amendment to Agricultural Credits Act."

AMERICAN INSTITUTE OF CO-OPERATION

(Continued from page 1)

Development of Types.
Possibilities and Limitations.
Status of State and Federal Legislation.
Education in Co-operation.

SECOND WEEK
Organization and Membership Problems
Preliminary Market Surveys.
Forms of Organization.
Organization Finances
Patronage Costs
Educational Work with Members
The Co-operative and the Consumer.

THIRD WEEK
Operating Methods and Management Problems
Source of Personnel.
Business Practices.
Auditing and Accounting
Marketing Finance.
Warehousing
Grading and Standardizing.
Methods of Pooling.

FOURTH WEEK
Sales Policies and Price Problems
What is Meant by Orderly Marketing.
Selling Plans for Principal Commodities.
The Development of Markets.
Price Objections of Co-operatives.
Selling Problems.
Credits and Collections.
Effect of Today's Price on Tomorrow's Production.

Registration

The student body will consist of co-operative leaders and active workers in co-operative marketing, graduate students and members of faculties and of persons interested in the broader aspect of co-operation. The registration fees are $15 for the four weeks, $10 for the two weeks and $5 for the one week session.

The list of participating organizations in this movement includes the following:

The American Farm Economics Association.
The National Association of Commissioners, Secretaries and Departments of Agriculture.
The National Grange, Patrons of Husbandry.
The American Farm Bureau Federation.
The Farmers' Educational and Co-operative Union of America.
The National Co-operative Milk Producers' Federation.
The National Board of Farm Organizations.
National Association of Marketing Officials.
The Sun-Maid Raisin Growers of California.
The American Committee on the International Institute of Agriculture at Rome.
The Federated Fruit and Vegetable Growers.
The Staple Cotton Co-operative Association of Mississippi.
The National Pecan Growers' Exchange.
The Illinois Agricultural Association.
The Pennsylvania Farmers' Co-operative Federation.
The Farmers' National Grain Dealers' Association.

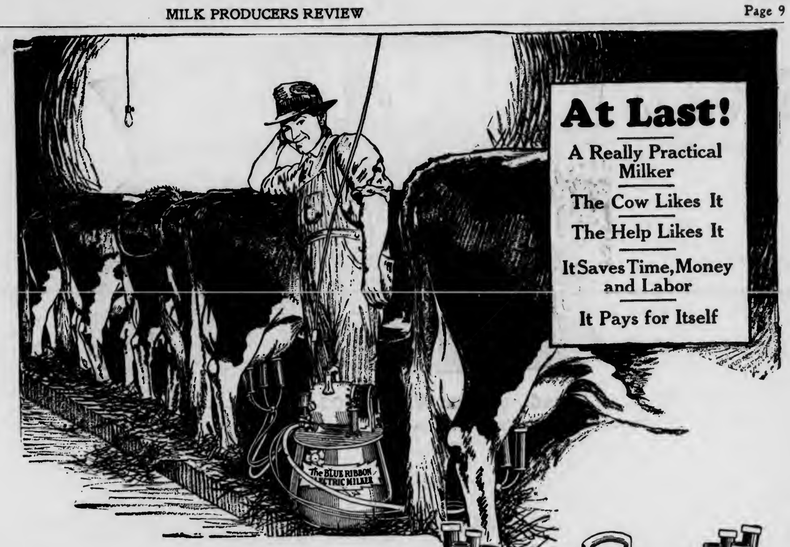
The officers of the American Institute of Co-operation are:

President, Richard Pattee, Newton Highlands, Mass.

Vice President, B. W. Kilgore, Raleigh, N. C.

Treasurer, L. S. Tenny, Washington, D. C.

Secretary, Chas. W. Holman, 1731 Eye St., N. W., Washington, D. C.



At Last!
A Really Practical Milker
The Cow Likes It
The Help Likes It
It Saves Time, Money and Labor
It Pays for Itself

The BLUE RIBBON Electric Milker

Absolutely No Installation Cost

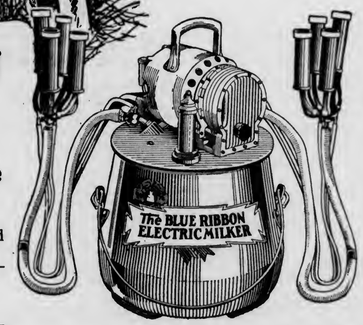
Every Farmer Can Afford One

JUST A FEW REASONS WHY:

1. Complete plant on the pail cover, self-contained and portable.
2. Runs by electricity—Central Station or Home Plant—the most uniform power known.
3. Low Operating Cost, using only ¼ H. P. motor.
4. Most reliable pulsator—thoroughly mechanical—steady, soothing and positive regularity of action.
5. Only a few parts—simple, compact and durable—extremely quiet in operation.
6. Nothing to clean but the pail, teat cups and milk tubes—little time necessary to keep in perfect sanitary condition.
7. Will milk 20 cows in an hour with only one man's supervision.
8. Always ready for work—starts at the touch of the switch.
9. Assures clean, sweet "Grade A" milk in greater quantity at lower cost—*bigger milk checks.*

Install a BLUE RIBBON and milking will no longer be a drudgery—your worries over help will disappear—time and labor will be saved. You will see your herd contented and giving down a larger quantity of milk, soon repaying your investment.

"An ounce of proof is worth a ton of talk"



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For Illustrated Catalog and Liberal Sales Plan

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No Obligation—You Are the Sole Judge

A Year to Pay in monthly installments if you and your herd are satisfied.
If dissatisfied return the machine at our expense and the transaction is closed.

SATISFACTION GUARANTEED

BALTIC SALES CO., Inc.
Dept. N-325 105 So. La Salle St.
CHICAGO, ILL.

Old Money Wanted

Inspect every coin you get. Many worth big premiums. Will pay $50 for 1913 nickle with Liberty head (not Buffalo); $50 for 1894 dime S. mint. Coins as late as 1916 are worth cash premiums. We pay cash premiums for all rare coins. Get posted so you will know a valuable coin when you see one. Send 4c for large coin circular. May mean big profit to you.

NUMISMATIC BANK, Dept. 576. Fort Worth, Tex.

FOR SALE
Choice Seed Corn 1000 bu. 100-day Improved Yellow Dent; 500 bu. Lancaster County Sure Crop; 300 bu. Early White Cap, nearly all 1923 Crop, all high germination. Write for price, Sample and Circular. Order early and save money.

SHULL FARM Box 14A, Tullytown, Bucks Co., Pa.

Cherry-Bassett Company
Complete Equipment for handling Milk and its Products
BESTOV
CANS, CAPS, BOTTLES, PAILS, SEPARATORS, COOLERS
STERILIZERS, BRUSHES, TESTERS ETC. IN STOCK
2324 Market St. PHILA. 33 So Charles St. BALTIMORE

Aunt Ada's Axioms: Tact is not cheerful lying; neither is frankness mere blunt expression of opinion.

Uncle Ab says it is the duty of every good farmer to keep himself and his farm well posted.

EMMADINE FARM

Hopewell Jct. N.Y.

J. C. PENNY
Owner
JIMMY DODGE
Manager

Mixter May Princess 124204—Grand Champion Eastern States Expo., 1924 Grand Champion Nat. Dr'ry Show, 1924

Shorewood Resolute 71989—Grand Champion Eastern States Expo., 1924 Grand Champion Nat. Dr'ry Show, 1924

Emmadine Farm Wins in 1924

1. 28 prizes at New York State Fair.
2. 42 prizes at Eastern States Exposition, losing only one first.
3. Both Grand Champions at the National Dairy Show.
4. In making world's production records.

EMMADINE FARM becomes world renowned through its endowment by Mr. Penny, which makes it a perpetual breeding establishment and outstanding Guernsey Farm.

SUGARED
SCHUMACHER FEED

Mr. Dodge, who achieved reputation and distinction during his many years of successful management of that great Jersey breeding establishment, HOOD FARM, where so many great records were made under his supervision, continues to find Sugared Schumacher Feed the most desirable and satisfactory source of carbohydrate for the milking herd, the dry stock, and the young, growing stock at Emmadine Farm.

The Quaker Oats Co., Chicago, Ill.

"It will interest you, I am sure, to know that we are large feeders of Sugared Schmacher Feed, making it the base of our dairy ration and fitting ration. This should be of special interest to feeders and fitters because of the record our herd made in 1924. We won Grand Champion Bull and Grand Champion Cow at the Eastern States Exposition and the National Dairy Show. We have had 26 cows finish A. R. records here on the farm, averaging 11,461 lbs. milk, 588.67 lbs. fat."

Yours very truly, EMMADINE FARM, (Signed), Jimmy Dodge, Mgr.

What better evidence can be presented to you of the economic value of Sugared Schumacher Feed? Give it a trial—your dealer can supply you; if not, write us. D-22

The Quaker Oats Company Dept. 1665 Address Chicago, U. S. A.

SILO FACTS

acid-rust-freeze-wind-fire-PROOF

air-tight no swell and shrink troubles

WE build Ross Metal Silos, but users sell them. Why Ross Metal is superior told by successful farmers in 40-page unbiased, most practical and helpful silo booklet ever written. FREE if you ask for "Users' Own Words"—No. 33

We have a wonderful proposition for dealers and agents.

E. W. ROSS ENSILAGE CUTTER AND SILO CO.
Established 1850
33 Warder St., Springfield, Ohio

Keep Your Cows From ABORTING

Don't keep on losing calves and losing valuable cows because bacon. End Contagious Abortion by using ABORNO, the pioneer, guaranteed remedy. Easily administered treatment kills abortion germs quickly without harming cattle. Write for Free Book, with letters from users.
ABORNO LABORATORY
32 Jeff St. Lancaster, Wis.

The best way to meet the dairy cow's mineral needs is to apply lime and phosphorus, in the form of ground limestone and acid phosphate, to the soil, and thereby grow more high mineral roughages, such as clover and alfalfa.

1194 VIOLATE FOOD LAWS AND PAY PENALTY

During 1924, 1,194 cases were terminated against persons who violated State laws in selling eggs, milk, butter, sausage and other foods, $439,839.61 were collected in fines and 6,466 samples of foods were analyzed, according to James Foust, Director, State Bureau of Foods and Chemistry, who has just submitted his annual report on the activities of the Food Section to F. P. Willits, Secretary of Agriculture, Harrisburg, Pa.

Running true to the slogan, "If it's a food we have analyzed it," Mr. Foust has insisted upon the most rigid enforcement of all food laws under his charge. During the 18 years in which he has directed the food law enforcement work in the State Department of Agriculture, 125,683 samples of food have been collected and analyzed, 17,575 cases have been terminated against violators and $5,503,868.56 has been collected in fines and fees. All this work has been conducted at an expense to the state of only $1,496,931.57, which means that the Food Section has returned to the State Treasurer $4,006,936.99 more than it spent.

The number of prosecutions successfully terminated in 1924 represents the second highest number of any one year since 1907, being exceeded in 1923 by only one case.

EASTERN GUERNSEY BREEDERS' ANNUAL MEETING

The Eastern Guernsey Breeder's Association held its annual meeting at the Adelphia Hotel, Philadelphia, on February 6th, 1925.

Formal reports were made by the Extension Agent.

Resolutions were adopted directing the organization to use all the influence possible to authorize an expenditure of $2,000,000, by the state legislature of Pennsylvania, for cattle tuberculosis eradication in Pennsylvania during the next two years.

Twenty-five new members were admitted and eleven new members proposed for membership in the association.

Addresses were made by G. W. Koser, president; C. D. Cleveland, of the Boys' Calf Club; J. B. Robertson; Dr. Russell and Louis M. Merryman.

The following officers were elected:

President: G. W. Koser, Biglersville, Pennsylvania.

First vice president: M. E. Leeds, Philadelphia, Penna.

Second vice president: L. M. Merryman, Sparks, Md.

Secretary: M. M. Hollingsworth, Landenberg, Penna.

Treasurer: I. W. Roberts, Philadelphia, Pennsylvania.

The following membership committee was named: Messrs. M. T. Phillips, C. D. Cleveland and J. R. E. Turpin.

AGRICULTURAL OUTLOOK FOR 1925

The general marketing outlook, as issued by the United States Department of Agriculture, reflects, as far as dairy products are concerned, the same conditions as have been outlined for several months, by the Inter State Milk Producers' Association.

"Future expansion inadvisable" has been suggested as far as dairying was concerned.

Among the suggestions made are the following:

Corn—produce to meet feeding needs.

Potatoes—no further reduction in acreage.

Tobacco—increase in acreage undesirable.

Dairying—further expansion inadvisable.

Beef Cattle—outlook favorable.

Sheep—no immediate danger of overproduction.

Poultry—outlook for market eggs favorable; lower prices for first half of year on market poultry.

Hogs—outlook favorable.

ESTIMATED VALUE OF PENNA. LIVESTOCK IS $150,705,000, DECREASE OF $6,379,000 SINCE JANUARY 1, 1924

The estimated value of livestock other than poultry on Pennsylvania farms on January 1, 1925 is placed at $150,705,000 by the Federal-State Crop and Livestock Reporting Service, Pennsylvania Department of Agriculture. This value is $6,379,000 less than the estimate on January 1, 1924. The greatest decrease is in swine which were valued at $1,670,00 less or 9.5 per cent. less than a year ago. Mules decreased in value 8.1 per cent; horses, 7.0 per cent; milk cows, 2.6 per cent. The only two classes in which an increase in value is shown are sheep and cattle other than dairy cows.

There has been a decrease in number as well as value of horses, mules, milk cows and swine. Swine show a decrease of over 200,000 head, horses 10,000, mules 1,000, and milk cows 11,000.

Total value of farm livestock other than poultry, during the past six years was as follows:

1925	$150,705,000
1924	157,084,000
1923	162,406,000
1922	159,911,000
1921	190,249,000
1920	232,752,000

Comparative value of milk cows, (Dairy Cows one year old and over).

	Number	Price	Total Value
1925	1,081,000	$61.00	$65,941,000
1924	1,092,000	62.00	67,704,000
1923	1,071,000	60.00	64,260,000
1922	1,071,000	60.00	64,260,000
1921	1,050,000	77.00	80,850,000
1920	1,050,000	98.00	102,900,000

The Pennsylvania Department of Agriculture announces that it has copies of reports of Farmers' Institutes and proceedings of the State Board of Agriculture dating back to 1903, and that it is interested in getting copies of these historical publications into the hands of all interested parties. The reports referred to were issued annually from 1903 to 1918. As long as the supply lasts, these will be distributed to all persons making a request. Request should be addressed to the Editor, Pennsylvania Department of Agriculture, Harrisburg, Pa.

Good rotations increase crop yields, reduce production expenses, and make for a better and more profitable diversity. Spring is the time to plan them.

What Robinson Crusoe Needed

Robinson Crusoe, stranded on his desert island, could have had the world at his service if he had found a Sears-Roebuck catalog. For it would have brought him all the things he needed to make life worth while.

Today, nearly nine million families everywhere in the United States use our catalog whenever they want to buy at the lowest prices.

If you are not now in this great family of thrifty buyers, we would like to send you "THE THRIFT BOOK OF A NATION" so that you may see the endless opportunities it offers for savings on everything you and your family need.

The WORLD'S LARGEST STORE is yours to command. Our buyers go everywhere good merchandise can be bought at prices that will insure you the biggest savings; we maintain stores and warehouses throughout the country to give you the best and quickest service; 99 out of every 100 orders we receive are shipped in less than twenty-four hours. We sell only dependable goods, honestly described and illustrated.

Your copy of our New General Catalog for Spring and Summer is ready. Just fill in and mail the coupon!

Sears, Roebuck and Co.
CHICAGO · PHILADELPHIA · DALLAS · SEATTLE

In less than a day—
Your order is on its way

Send for Your FREE Copy

If you haven't a copy of our New Big General Catalog, send for it today. This convenient coupon will bring you free our great Spring and Summer book, with its 35,000 bargains.

Mail the coupon today

Mail the coupon TODAY to the store nearest you

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Send Latest General Catalog.

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Postoffice.....

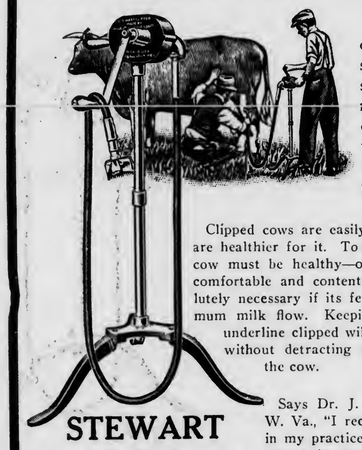
Rural Route..... Box No.....

State.....

Street and No.....

TEXT CUT OFF

How Clipping Cows' Flanks and Udders *Increases Milk Production*



Choke the pores of a cow's skin and she would not long survive. The pores must breathe. Filth, caked and clinging to the cow, retard the natural functioning of the cow.

Clipped cows are easily kept clean and they are healthier for it. To give the most milk a cow must be healthy—only then does it feel comfortable and contented—a condition absolutely necessary if its feed is to induce maximum milk flow. Keeping flanks, udder and underline clipped will increase milk profits without detracting from the comfort of the cow.

Says Dr. J. N. Nicholson, Salina, W. Va., "I recommend cow clipping in my practice. There is a milk increase in every case, the milk is richer and there is much better sanitation. My dairy practice covers 15 miles of country."

To clip a cow requires very little time—and then the cow is cleaned thoroughly merely by wiping with a damp cloth.

STEWART

No. 1 Ball Bearing Clipping Machine

The best made. Ball bearing. Turns easy. Strong, sturdy and lasting. Anyone can do a good job with it. Easily moved about. Equipped with our latest model B-1 clipping head. Clips cows, horses, mules and other livestock without changing. $14.00 at your dealers—or send us $2.00 with order. Pay balance on arrival.

CHICAGO FLEXIBLE SHAFT COMPANY

5564 Roosevelt Road Chicago, Illinois

World's Largest Makers of Clipping and Shearing Machinery

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY

PAINTS AND VARNISHES

Write for Color Cards and Booklet "Paint Pointers"

EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

More Silage on Less Power

Throws And Blows — Saves One Man

F. B. Messick, Middletown, Del., writes: "We used your L-16 3-knife Papec with a Fordson tractor and did excellent work." Any tractor will run an L-16 or N-13 Papec, operating with less fuel and less strain than any other make of equal capacity. Running at the low speed of 600—700 r. p. m., you can fill any silo without clogging the pipe. Avoids delays and breakdowns.

Simple construction, with few parts and rigid one-piece main frame assure long life. Every part is easy to get at and the knives can be quickly changed. Over 50 distributing stations assure prompt service in emergencies.

Write for free Catalog, mentioning size of silo. We'll also send U. S. Gov't. Bulletin, "Making and Feeding of Silage".

PAPEC MACHINE COMPANY
193 Main St. Shortsville, New York

Your Neighbor has a PAPEC --Ask Him

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BELL PHONE No. 1 WEST CHESTER, PA.

HEALTH SUGGESTIONS FOR SMALL CHILDREN

About 20 Per Cent of the Children in the Public Schools of America Are Poorly Nourished

WHY?

Largely Because of Wrong Health Habits in the Early Years of the Child's Life—Before He Goes to School

GIVE YOUR CHILD HIS CHANCE FOR HEALTH

Every child under six years of age needs:

1. A regular examination at least once a year by a physician.
2. Correction of any defects the physician finds—as enlarged or diseased tonsils, adenoids and decayed teeth.
3. Daily attention to cleanliness of the skin and teeth.
4. Ten or twelve hours sleep every night—with windows open.
5. Two rest periods a day—1 hour in the late morning (better with clothes removed) and one-half hour's quiet after the noon meal and before the evening meal.
6. Play and exercise in the sunshine and fresh air every day.
7. Simple, wholesome food at regular hours—with emphasis on good mastication or chewing.
8. A natural bowel movement every day. Use no drugs or laxatives.

FOODS YOUR CHILD SHOULD HAVE EVERY DAY

One quart of milk, if possible.

Some fresh vegetables, especially green, leafy vegetables, as spinach, chard, beet tops.

Some fruit, cooked or fresh, as prunes, oranges, apples.

Cereals and bread, especially those made from the whole grain, like oatmeal, Ralston's breakfast food, wheatena, pettijohn, cornmeal and whole wheat, graham or rye bread.

Children under six should not have

Tea, coffee or alcoholic drinks	Salads
Sweet cakes or pastries	Rich foods of any kind
Soft drinks or soda water	Much meat
Candy or ice cream often	Fried foods

It is best to give the heavy meal in the middle of the day.

Fresh uncooked fruits should be added gradually—small amounts at a time. Better not give them at night. Add all new foods gradually.

Use the cooking water of all fresh vegetables for soups or with the vegetable itself.

Philadelphia Child Health Society

FOODS YOUR CHILDREN SHOULD HAVE

CREAM OF WHEAT

1 c cream wheat or farina; 1 t salt; 4 c or more of water. Stir cereal gradually into boiling salted water, cook directly over the fire 5 to 8 min. then over the hot water in double boiler 1 hour or more.

Rolled Oats should be steamed 3 to 4 hours.

Thoroughly cooked rice may be used.

Note—Beaten white of egg may be added to any cooked cereal.

MEDIUM WHITE SAUCE

1 c milk; 2 tb fat; 2 tb flour; ½ t salt;

Melt the fat, add the flour and seasonings, stir until blended. Add the cold milk, stirring constantly until mixture boils thoroughly. The sauce may be cooked 10 min. longer over hot water, if desired.

This sauce may be used as the basis for cream soups and thinned with hot milk, if in any case vegetable pulp makes too thick a soup.

This sauce may be used for creamed or escalloped dishes or gravies.

For puddings, use in place of milk, either 1 c water or 1 c fruit juice, or 1 c cream. Use 1 tb flour, sugar to sweeten and 2 tb butter except for the cream sauce.

FOR PUDDING SAUCES ANY DESIRED FLAVORING MAY BE USED

CREAM OF CELERY SOUP

2 c White Sauce; 1½ c celery cut in small pieces; 1 c boiling water; 1 small onion; 1 tb butter; dash salt.

Cook celery and onion in water until they are very tender. Rub through a sieve, add seasonings and White Sauce. Reheat and serve.

Note—Cream of spinach, potato or pea soup may be made by this same method. If in any case the soup is too thick, thin with hot milk.

JUNKET

1 c milk; 2 tb sugar; ¼ t vanilla; ¼ junket tablet; 1 t lukewarm water.

Heat milk until lukewarm; add sugar and flavoring. When sugar is dissolved, add the tablet dissolved in the lukewarm water. Pour immediately into cups or glasses. Let stand in warm room undisturbed until firm like jelly, then put in a cold place. Serve with cream and sugar or soft custard. Junket may be served in a variety of ways with fruits.

Note—In place of vanilla, cinamon, nutmeg, chopped preserved ginger, cocoanut, cocoa, or other flavors may be substituted.

CREAMY RICE PUDDING

2 c milk; 2 tb rice; 2 tb sugar; pinch salt.

Wash rice; mix ingredients and pour into oiled baking dish. Bake for 2 or 3 hours in a very slow oven, stirring occasionally at first to prevent rice from settling.

SOFT COOKED EGGS

Put water in deep dish, using 1 c to each egg. When the water boils vigorously, put in eggs, cover, place on cooler part of stove where the water will not boil and let stand 8 to 10 minutes.

Note—This is the approved method of preparing eggs for children.

BAKED POTATOES

Bake potatoes until thoroughly done. Remove from skins, mash thoroughly, add cream and season lightly with salt. If cream cannot be had, use butter.

For older children, the beaten white of egg or the beaten yolk, or the entire egg may be beaten and added to the potato.

Sometimes, the mashed potato is returned to the shell and browned in the oven.

Other desirable vegetables for children are thoroughly well cooked peas, young lima beans, string beans, stewed celery, asparagus and squash all well mashed. Well cooked spinach cut in small pieces.

BAKED APPLES

Wash and core sour apples. Fill cavity with 2 t sugar. Place in baking dish. Cover bottom of dish with boiling water, bake in hot oven until soft, basting with syrup.

Small children should not eat the skin.

Other desirable fruits for children are stewed apples, prunes, apricots.

THE PENNSYLVANIA STATE COLLEGE
School of Agriculture and Experiment Station
Department of Agricultural Extension
M. S. McDowell, Director

DAIRY SCHOOL AT MIDWAY, DELAWARE

(Continued from page 1)

other community in the Philadelphia Milk Shed in a better position to produce milk economically than the Nassau community," he added. "The large acres of soy beans grown, leaves on the farm an abundant supply of soy bean straw which possesses considerable feed value, makes excellent feeding material, and adds fertility to the soil by way of the manure pile."

Mr. Smith also stressed the importance of silos, stating that there should be a great increase in the number of silos in the Nassau community so as to provide succulent feed through the winter months.

Mr. R. M. Dwyer, also of the Dairy Council, then discussed the use of concentrates on the farm. "Concentrates should be used to supplement the home-grown feeds," said Mr. Dwyer, "and to supplement commercial rations where needed." The effect on the cow of such feeds as cotton seed, linseed oil meal and other concentrates was discussed. Mr. Dwyer pointed out that a dairy ration should be palatable, bulky, should provide the needed nutritive requirement and be as low in price as is consistent with quality.

Following Mr. Dwyer's address Professor T. A. Baker, of the University of Delaware, spent a valuable period in demonstrating the actual figuring of balanced rations, using a blackboard to show the simplicity with which rations could be figured out. Professor Baker pointed out in an easy manner that was clear to every farmer present, that the balancing of a dairy ration was not complex problem that many believed it to be, but was rather a simple process of computing the nutritive value of various feeds.

At the evening session on February 18th, Mr. D. A. McCarthy, of the Dairy Council, discussed the keeping of dairy records. "It is very important that the dairyman who desires to make a profit from his dairy keep accurate records on each of his cows. He should know how much milk she produces, the test of her milk, the amount of feed required to feed her and the profit derived from each individual animal. While it is possible for the farmer to do this himself, experience has shown that it is usually practical for him to join a Cow Testing Association wherein a number of farmers (usually about 26) band themselves together into an organization and employ a man to weigh and test the milk each month, to estimate the cost of feeding the cows, to assist him in balancing rations and to give him feeding advice in connection with his dairy operations."

"No business man could long succeed," said Mr. McCarthy, "who did not know whether he was making a profit or sustaining a loss on each individual article he sells. Neither can the dairyman long succeed unless he knows whether or not each individual cow in his herd is returning him a profit."

"It is very important, also, to keep breeding records on the farm in order that we may know just when the individual cows were freshened, so as to equalize production throughout the year.

"Dairy records form a basis of knowing the progress made in our dairy operations.

Mr. C. I. Cohee, Director of the Quality Control Department of the Dairy Council, spoke of the importance of building a community through better dairying methods, stating that he had a vision of what might transpire in the Nassau district should the suggestions which had been made at the Dairy School be carried out. "Better dairying methods and better cows will mean more profit to the dairyman and will enable him to improve his standards of living very materially, as well as increase the value of farms in the community."

"He expressed the hope that at least one Bull Club and one Cow Testing Association would be started in the district. Immediately following Mr. Cohee's address, members of the Inter-State Milk Producers' Association made plans to hold a special meeting in the near future to definitely arrange for the two projects which Mr. Cohee outlined.

Dr. C. C. Palmer, of the University of Delaware, discussed the common ailments of cattle and their methods of treatment. Dr. Palmer stressed the importance of T. B. eradication and also the importance of riding our herds of abortion.

"Tuberculosis an abortion comprise two of the greatest losses to the dairyman, and every effort should be made to stamp out these diseases."

Miss Ethel Windle, of the Dramatic Department of the Dairy Council, told the story entitled "Food Fairies." Miss Windle asked that everyone present imagine themselves children back in the little country school house, and in the questions she asked of the audience the responses indicated that it was an easy matter for many of those present to again imagine themselves children in the school room. A very hearty response from the audience greeted Miss Windle and the "Food Fairies" was much enjoyed.

Music for the evening program was furnished by Brinser's Orchestra.

Two quartettes—one consisting entirely of farmers and the other of Lewes, Delaware, business men—vied with each other in rendering a number of very pleasing vocal selections.

Much credit is due the Midway community, Dr. Little of the Presbyterian Church and Mr. M. C. Vaughn, County Agent, for the success of the first Dairy School in which the Dairy Council cooperated.

Always

The Same Formula

The Same Feed

The Larro formula will never be changed, regardless of the cost of ingredients, until a better one has been found and proved. When a feed formula is changed you have a different feed, untried and unknown. The Larro formula has been developed by years of experiment and practical feeding tests, which have demonstrated that it will economically produce the most milk and keep cows in good condition and in good health. Any change, therefore, however slight, would cost you, the dairyman, both milk and money, unless the same exhaustive tests had first proved the new formula superior.

The best feeding stuffs that can be bought are seldom twice alike. They may look much the same, but they're not. Each ingredient in Larro is first brought to an exact standard of chemical composition, moisture, taste, smell, bulk and color, before it is ready to use; then it is accurately weighed into the mixture. The amount of each ingredient per ton of feed never changes. The result is always the same feed — no matter where you buy it, or when. This uniformity is your guarantee of profitable production, *always*, from any cow that has the capacity to produce milk profitably.

THE LARROWE MILLING COMPANY
Detroit, Michigan

Larro

The SAFE Ration for Dairy Cows

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building Philadelphia, Pa.

Lewis Linseed Meal

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Made the "Old Process" Way

By

John T. Lewis & Bros. Company

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Manufacturers of DUTCH BOY Paint Products

SOUTH JERSEY FARMERS SELL AND BUY CO-OPERATIVELY

Organized and incorporated in April of 1909, the South Jersey Farmers' Exchange, Woodstown, N. J., during its sixteen years of activity, has transacted business to the amount of $20,559,515. Its capital stock has increased from $11,050 to $250,000. Twice during the period stock dividends of 100% have been declared, in 1917 and in 1922. Net profits carried to surplus amounted to $315,633 for the sixteen year period. The profits per $100 of business transacted have ranged from 70c in 1920 to $2.87 in 1917. Dividends have been paid on capital stock since 1917, in which year they were 104%, including the 100% stock dividend. In 1918 and 1919, 6% was paid; in 1920 and 1921, 8%; in 1922, 104%, including stock dividend; in 1923, 4%; and in 1924, 5%.

The figures telling the story of the growth of the organization as measured in dollars are as follows:

Year	Amount of Business	Net profit to Surplus	Profit per $100 of Business
1909	$ 363,249	$5,233	$
1910	445,092	4,438	.98
1911	877,883	11,902	1.35
1912	734,746	17,801	2.42
1913	703,220	15,016	2.13
1914	750,085	15,895	2.12
1915	746,686	14,123	1.89
1916	1,087,347	29,737	2.73
1917	1,602,558	45,970	2.87
1918	1,750,539	18,498	1.05
1919	2,073,687	30,576	1.47
1920	2,844,833	20,037	.70
1921	1,961,004	15,966	.81
1922	1,677,954	22,554	1.34
1923	1,553,614	23,281	1.50
1924	1,386,981	24,599	1.72

Available figures regarding the quantities of the various commodities sold or bought by the exchange for its members are as follows:

Potatoes	13,274 carloads
Tomatoes	1,460 carloads
Fertilizer	124,696 tons
Feed	120,122 tons
Lime	14,975 tons
Coal	18,741 tons
Baskets	966,899
Grass seed	2,761,862 pounds
Seed potatoes	142,185 sacks

Potato shipments have varied from 356 carlots in 1918 to 1,288 in 1922, Tomato shipments ranged from 67 cars in 1918 to 436 cars in 1922. The potato shipments by years were as follows:

Year	Carlots
1909	945
1910	969
1911	987
1912	896
1913	722
1914	799
1915	1,078
1916	907
1917	780
1918	356
1919	527
1920	963
1921	845
1922	1,288
1923	443
1924	769

A falling off in quantities of supplies purchased for farmers in 1924 is attributed by the management to a change of policy. During the year a rule was adopted to the effect that all business should be done on a 30-days basis, rather than on 3- 4 or 6-months time. In the words of the manager, "We thought it better to sell less than to take chances with book accounts. We were right, as the profits have increased and we were able to pay larger dividends, as we did not lose any money by uncollectable accounts, whereas in previous years we were forced to charge off several thousand dollars because of accounts which could not be collected."

Warehouses are operated at four outlying points as well as at Woodstown.

Willard

Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

SAVE MONEY

Crasco Silos are good Silos and low in cost. Carefully manufactured from selected stock. Doors close tight and are easily opened from convenient door front ladder. If you want a Silo get a Crasco and save money.

Write for full information.

CRAINE SILO COMPANY, Inc.
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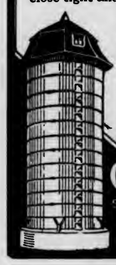

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KERR'S LIVELY CHICKS

Get chicks that pay you—quickly!

Write for this book—FREE

The Kerr Lively Chicks you buy now will be heavy layers in five months. Our booklet, "How to raise baby chicks—and make them lay in five months," tells you how to get these quick returns. We'll gladly send you a copy free on request.

Such splendid records are certain with Kerr's Lively Chicks. They are bred from heavy-laying stock. Every one carefully selected. 100% live delivery of healthy, vigorous chicks is guaranteed.

Write for the chick-raising book and "The Poultry Outlook for 1925" FREE, together with our list of low prices.

THE KERR CHICKERIES, Inc.
(Member International Baby Chick Association)

Dept. 37, Frenchtown, N. J. Dept. 37, Newark, N. J
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FOR SALE

Two cars mixed timothy and alfalfa **HAY**

Excellent horse hay

Also two cars second cutting **ALFALFA**

FRED. H. SEXAUER
c/o Dairymen's League Co-op. Assn
120 W. 42nd St. New York City

THE CHILDREN'S INTEREST IN MILK

There are a great many children in the vicinity of Philadelphia who believe that "Johnny Milk" is a flesh and blood person. They write him charming letters telling him how much they like milk and what it is doing for them. They always want him to send them something if it's only a letter, and he does. One request which came in the other day caused Johnny Milk to wonder how he was going to fill the order. Here is the letter, with spelling faithfully reproduced.

Dear Johnny:

"Please sent me some circus because we are steady about milk. Are teacher told us to get some circus. Will you please sent me some circus.

Very chatty is a letter from a young lady from Paradise, Pa., who writes:

Dear Johnny Milk:

"I was weight at school today and I got a white card. Please sent me a pine of milk. My teacher is very nice. I am eight years old.

I was out sledding and I had fun. My daddy has a bad cold and I told him to drink milk and get strong.

My Uncle Hirsh's leaving soon. My mother fell and hert her knee last night when she was sledding. The other children just came from sledding now and I am soon going to bed. We got some company now. I am taking some milk to school tomorrow.

I am drinking a lot of milk. My mother got a pretty light on her table.

I hope you are not sick. excuse my writing now this is a very long while we got to kittens and they drink milk. I got a nice dress for Cristhams. I got nice pockets books and now I must clous good night.

A young resident of West Chester, Pa., writes in a letter:

"The boys said, "Let's have a Health Club, and the girls said let's have meetings on Friday."

Johnny Milk followed this up and upon asking for further information about the progress of the club received the following.

Dear Johnny:

"I got your letter and please with it. I showed it to the members of our club and they said I should be Pres. They said they would like to have an pin and some pictures because we have a room. We have a health day which is on Saturday. Each memmber gets a glass of milk and they have exercises for about 10 minutes. Helen wrote the minutes and here they are.

"The meeting of the Health Club was held on Feb. 1, 1925. the meeting was opened by our Pres: Clarence, by giving rules for our Health Club. Each of us took part in reading verses in the Bible.

We were also talking about a Valentine Party. We decided to have Saturday for health day in which we each have a glass of milk and exercises for about 10 or 15 minutes."

P. S. There are eight memmbers of our club,

Yours truly,
Pres.

Another letter from the little lady from Paradise shows she is still interested in milk.

Dear Johnny Milk:

"I thank you very much four thoes books that you gave me I took them to school and the teacher read them too the children and they liked them very much. I was going to go away put it rained and we could not go. Anna are playing cards. I played one game and at's all. I got forty-three valentines I got four books and I and read them all one is about three little kittens and the other is Cinderlla and you now the other too are about you. I hope you are sick. I had my tonsils and onids took out I did not have any breakfast or no dinner or no supper and the nese day I came home and I could not walk. I came home a automobile. Mother and father went to lancaster last night Be a good boy. father does not his cold now. When is your birthday? My is the 24 of April. I weight 5 and a quarter. I got a new coat and a new gloves and a hat. I still drink milk. Mother said that I am getting fat so do I think.

Good by
Your's turly.

Johnny Milk welcomes letters from his little friends and is glad to know that they are interested in milk and in their own health. He would like to get more letters from boys and girls.

Cow gives 16,255 lbs. of milk and $318. Profit in one year

The Lake Run Jersey Farm
Urbana, Ohio

February 18, 1925.

Mr. Chas. J. Huxel,
Springfield, Ohio.

Dear Sir:-

For your information I am glad to report the following figures of a test just recently finished by Heidi's Reminder 420442, Jersey Cow owned by me.

Her ration consisted of one half Purina Cow Chow and one half corn and oats chop, this mixture fed at the rate of one pound to each three and one half pounds of milk. The roughage consisted of beet pulp and alfalfa hay.

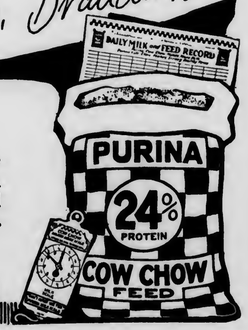
During a period of 365 days she produced 16,255 pounds of milk, 766.3 pounds butter fat for which she received the gold medal award. This record was completed just six weeks before she freshened again, which I consider very remarkable.

The feed cost for this period was $172.75. The net profit above feed cost was $318.00.

At no time during the entire test period was she off-feed for one feed, which I attribute to the excellent qualities of Purina Cow Chow in the ration.

I am now using Cow Chow on my entire herd of twenty Registered Jerseys with very satisfactory results.

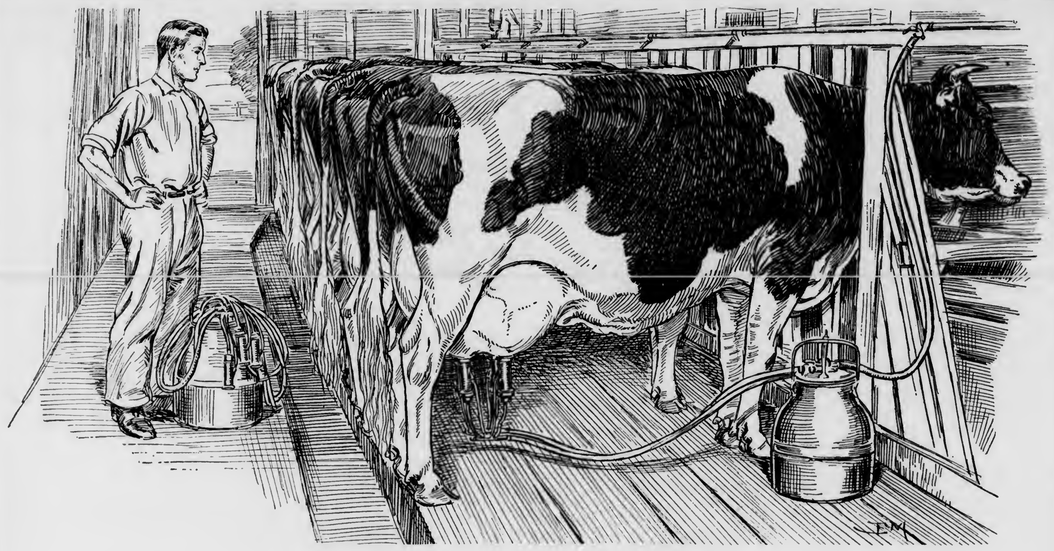
Very truly yours,
G. W. Standish



WRITE us for full information regarding Purina Cow Chow, and for a free copy of the 100-page Purina Cow Book. Order Purina Cow Chow from the feed dealer with the red, white and blue checkerboard sign.

PURINA MILLS, 854 Gratiot Street, St. Louis, Mo.
Seven Busy Mills Located for Service

There are now more than 12,000 co-operative marketing organizations in the United States with a total membership of about 2,000,000 farmers and doing an annual business of more than $2,500,000,000. Records show that 70 per cent of all the associations are in the 12 North Central States, which include the great corn and wheat producing areas. Six per cent. of the organizations are in the three Pacific Coast States.



Read what these Dairymen say about the DE LAVAL MILKER after 4 years' use

"I have used my De Laval Milker nearly four years and it has given perfect satisfaction. I have a herd of 15 Holstein cows which I take care of myself. They are averaging me 10,000 lbs. of milk and 300 lbs. of butter-fat per year. If they were not well milked they could not do that."—*J. A. Griffith, Sheffield, Mass.*

"I have used my De Laval Milker nearly five years and would not know what to do without it; should probably sell the cows. I milk from 15 to 18 cows." —*F. B. Randall, Mt. Sinai, N. Y.*

"We have been using the De Laval Milking Machine since January, 1918. We are milking from 40 to 50 cows and our four units give entire satisfaction."—*A. Perregaux, Providence, R. I.*

"I have been using the De Laval Milker for about 4½ years. It has given entire satisfaction and is running perfectly now. The upkeep has been small."—*A. B. Wood, Bath, N. H.*

"My De Laval Milker after five years' use is all O. K. and doing as good work as it did at the start."—*A. E. Russell, Windsor, Vermont.*

"I have used a De Laval Milker for five years and like it very much. Am milking 40 cows and would not try to farm without one."—*Burton Hier, Proctor, Vermont.*

"My De Laval is now giving and always has given perfect satisfaction. I have a 3-unit outfit and have used it since March 1921 twice daily."—*P. E. Buckey, New Windsor, Md.*

"I have used the De Laval Milker for nearly five years. It has given me complete satisfaction and has never once failed me. I can say the De Laval Way is absolutely 'The Better Way of Milking.' It is also 'The milker that pleases the cow,' and no dairyman can afford to be without it."—*Simon N. Hertzler, Mount Joy, Pa.*

"The De Laval Milker has given the best of service and has not missed a milking since May, 1920, and we have not had one case of udder or any other bag trouble whatever; not even as much as a caked quarter since we have used it. We are also using a De Laval Separator and it is giving the best of service."—*T. J. Messinger, Columbus, Pa.*

"I have had my De Laval Milker five years and have had no trouble at all with it. My two boys, 12 and 10 years old, can milk just as well as I can with it, and I think it is the best on the market."—*Mark Bogart, Columbus Grove, Ohio.*

"We have used the De Laval Milker over four years to milk from 15 to 18 cows. It has done all claimed for it. I can earnestly say it has not failed on a single milking since the machine was bought." —*Joe B. Weaver, Barrs Mills, Ohio.*

"In regard to our De Laval Milker, we have always been delighted with it. We have had it about four years and it works as well as it did the first day." *R. A. Park, Kalamazoo, Mich.*

"Have been using the De Laval Milker for almost four years at very little expense. Am milking 21 cows in 40 minutes. Cows seem to like it better than hand milking and I believe they milk better, for it is hard to get a hand to milk a cow dry. Am still using the same rubbers that came on the machine."—*R. P. McLoughlin, Madison, Ind.*

"I am more than pleased with the De Laval Milker. This milker has been used for four years and never failed to work for me. The cows like it as well as I do. The cost of operating it is very small." —*F. A. Wissman, Quincy, Ill.*

"We are using the De Laval Milker, and also Separator, and like them both. We have used the milker more than six years, and it has milked 365 days in the year without a miss, except for two milkings—and that was not the fault of the milker."—*R. W. Mitchell, Auroraville, Wis.*

"We have used our De Laval Milker since 1921 and have not missed a day yet. It works as regular and safe and sure as a self-binder."—*Will E. Bicknese, Elmhurst, Ill.*

"I am satisfied with the De Laval Milker; it is the best milker I know of. We have had no trouble with it whatever in four years. It is easy to clean, and I like it better than any machine I ever saw. I am milking my cows up to the time they go dry."—*M. Grasser, Marinett, Wis.*

"We have been using a De Laval Milker for the past four years and have not missed a milking so far." —*C. H. Brandt, Council Bluffs, Iowa.*

Thousands of other De Laval Milker users are just as enthusiastic in their praise. If you are milking ten or more cows by hand you can soon pay for a De Laval in time saved and extra milk of better quality produced. Sold on easy terms.

Send coupon for full information.

THE DE LAVAL SEPARATOR CO., DEPT. 9829.
165 B'way, New York; 29 E. Madison St., Chicago

Send me your Milker ☐ Separator ☐ catalog (check which).

Name .....

Town .....

State.....R. F. D.....No. Cows.....

INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME V WEST CHESTER, PA., AND PHILADELPHIA, PA., APRIL, 1925 NUMBER 12

Agr. Economics & Farm Management Cornell University Ithaca, N.Y.

SPRING DAIRY COUNCIL CONFERENCE

ADVISORY COUNCIL AND EXECUTIVE COMMITTEE MEET POLICIES AND PROGRAMS DISCUSSED

The annual spring conference of the Advisory Board and Executive Committee of the Philadelphia Inter-State Dairy Council was held on Friday, April 3rd, at the offices of the council, Boyertown Building, Philadelphia, Pa.

Seventy five persons attended the conference, which was presided over by H. D. Allebach, vice president of the council.

The executive committee held its usual spring meeting at 4 P. M. Current reports were received and routine business transacted.

The following members were elected to serve on the Advisory Council, during the current year:

Dr. Clyde L. King, Chairman; Secretary of the Commonwealth.

Mrs. Henrietta Calvin, Supervisor of Home Economics.

Mrs. George Wertsner, Vice President of the Home and School League.

Julia Wade Abbott, Director of Kindergartens.

Dr. Wilmer Krusen, Director, Philadelphia Department of Public Health.

Dr. Charles Miner, Secretary of Health, Pennsylvania.

Dr. C. J. Bryan, Superintendent of Schools, Camden.

Dr. Edwin W. Adams, Principal of Philadelphia Normal Schools.

Madge T. Bogart, Home Economics Extension, State College.

Ida S. Harrington, Home Economics.

Dr Emily Bacon, Children's Hospital.

Miss Anna B. Pratt, Director White-Williams Foundation.

Dr. Joseph Willits, University of Pennsylvania.

Dr. Carlson Ryan, Professor of Education, Swarthmore.

Miss Louise Johnson, Head Nurse, Philadelphia Schools.

Dr. Charles Keene, Director, Bureau of Health Education, Penna.

Mrs. Wm. E. Lingelbach, Member Board of Education.

Mrs. S. Blair Luckie, Federation Women's Clubs; Board of Education, Chester.

The joint session was called to order at five P. M. when Mr. Balderston, briefly outlined the past policies and future program of the council work.

Miss Aubyn Chinn, gave a report of the nutrition department.

The following statistics were presented:

Statistical Report

	1924	1925
No. of schools reached...	200	420
No. of stories told	1,009	2,018
No. of plays given	122	151
No. of children reached..	189,256	264,018
No. of adults reached ...	4,003	14,893

Milk Service

Milk service has been introduced in some schools in Philadelphia and Camden, and throughout the following school systems:

Darby
Collingdale
Ridley Park
Glenolden
Trenton
Altoona
Haverford
Atlantic City
Abington
Lower Merion
Cheltenham
Upper Darby
White Marsh Valley

Normal Schools and Universities

Regular programs, demonstating the work of the Dairy Council and the material it has to offer teachers, have been conducted in the following normal schools, universities and teacher training schools:

School of Education, University of Pennsylvania.

School of Social Service, University of Pennsylvania.

Drexel Institute.

Temple University, Home Economics Department.

Trenton State Normal School.

Glassboro State Normal School.

West Chester State Normal School.

Teachers' College, Columbia University, New York (Dr. Thomas D. Wood's Graduate Class).

School of Ethical Culture, New York City.

Miss Myrtle L. Barger, of the Nutrition Department, outlined the work in Trenton, N. J., particularly in connection with "Factory Work."

Louise Elmore Northup, of the same department, outlined the methods of conducting "Food Demonstrations and the results obtained, an average of over 100 persons have attended each demonstration the past year.

Angeline V. Keenan, in outlining the work in Glassboro, N. J., presented as a outline of the general program, which indicates the scope of this class of work.

"How To Put Over a Health Program In Your School"

Accordingly the program below was approved and has been presented to all the students (300) this year.

I. Be Healthy Yourself (The Relation of Foods to Health)
Teeth and Health
Frances Hoag, February 26th, 1925.
Factors Related to Health
"Putting Pep in Your Motor"
A. V. Keenan, March 5th, 1925

II. Make Health Attractive to Parents and Children.
"The Foreign Play"
Health Dramatics
Del Rose Macan, March 12th, 1925

III. Correlate Health With Other Subjects.
Aubyn Chinn, March 19th, 1925

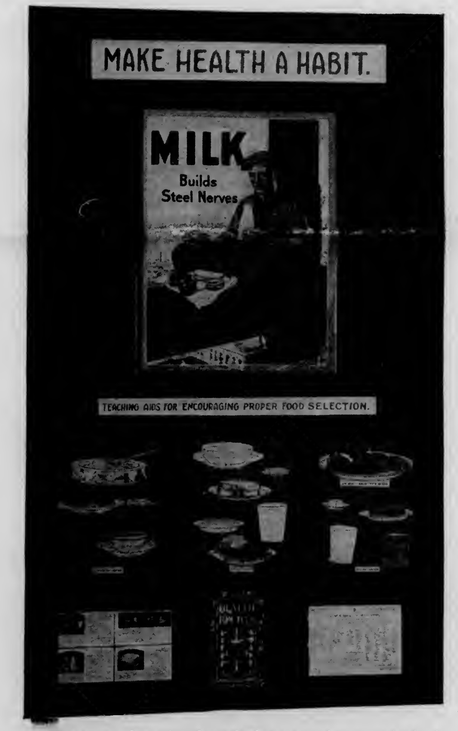
IV. Practice Health in School
"Doll Play", Children of Model School
Make Health a Habit
A. V. Keenan, March 26th, 1925

In addition to the above program which was given to the whole student body in the auditorium, there have been three after-school meetings for those who wished to acquaint themselves with the short plays. About 75 girls attended.

March 11—Foreign Play rehearsal.
March 24—Four Short Plays (How Milk is Made, Eating Milk, Following the Milk Can, Milk for the Whole World.)
March 25—Six Year Molar Play. Health in Toyland.

Five students in the Applied Science class are evolving devices for teaching the various factors related to health. These students are coming to the Dairy Council office, Saturday morning, April 18th, to see a demonstration of the series

(Continued on page 9)



This is one of a series of panels that are used in normal schools, universities and teacher training schools to interest teachers in their own health and to illustrate material that is available from the Dairy Council for health teaching in the public school.

There are six panels in the series. They are used one each week for six weeks. With each panel an appropriate piece of literature is distributed.

JUDGING A COW FROM A FARMER'S STANDPOINT

C. A. WILSON, Quality Control Department, Philadelphia Inter-State Dairy Council

The dairy cow furnishes a market for farm crops that otherwise would be hard to dispose of because of their bulk and their restricted use. She may be fairly described as a manufacturing plant which produces a finished product.

In selecting a dairy cow one should bear in mind the function of economic production. She must be able to take on and digest a lot of raw materials that would be hard to market as such. She must have the "apparatus" for secreting this material in the form of milk. This all means that the cow must have a well developed digestive system, a strong constitution, a sufficient mammary system and a marked dairy temperament. These are not all the needs of a good dairy cow, but they represent the things that must be present in every dairy cow.

Feeding capacity is indicated by a large barrel. If a cow is going to handle a lot of food she must have room for that food. This room is obtained by length of body, width in the rear part of the barrel and depth throughout. A dairy cow must be long from shoulders to hips, she must be wide across from hip-point to hip-point, and deep from the rear of the loin to the base of the abdomen. The loin should be broad and level—not sloping. If the loin is sloping the rear ribs will spring downward, giving a flatness to the barrel. If the loin is broad and level the ribs will spring outward, giving more rounded shape to the barrel and a greater capacity. The rear ribs should be flat and wide apart—one should be able to put three fingers between the last two ribs—and they should have great length.

Constitution. A strong constitution is indicated by great chest capacity, great depth from top to bottom of the body just back of the forelegs, thickness through the body in this region, width on the floor of the chest and fullness at the elbows. Just as the rear ribs should spring out, so should the fore ribs spring out just back of the shoulders. Too much narrowness in the region of the crops makes a smaller chest cavity, which means less heart and lung room. With this strength of fore rib, look for a rough shoulder. The shoulder itself should be smooth and the backbone should extend above the shoulder blades. A fullness of flesh between the blades is not desired except in dry cows that are being well fed for their next lactation period. Large nostrils indicate a strong constitution. If the nostrils are small we often find an undeveloped chest.

Mammary System. To secrete much milk a cow must have a well developed mammary system. The udder must be large and of the right quality. If one could see the cow's udder before and after milking, one could readily judge the quality—the udder that milks away well is of good quality, being elastic and free from fibrous tissue. One can also judge the quality of the udder by pressing it between the hands. If the udder is soft it is of the best quality. The udder should be long between the rear and front attachments. It should extend high between the thighs and be well filled in the fore quarters. The division between the halves should never be marked too much. If one quarter is smaller than the other it indicates that at some time there has been an affection more serious in the small quarter. The teats should be large enough for good hand milking and the milk should be easily drawn. The teats should be squarely placed in the center of each quarter of the udder which it serves.

Milk Veins. The milk veins are the large veins running forward from the udder upon the lower surface of the abdomen. They carry the blood from the udder. These veins should be large, long-branched and netted, and should enter the abdominal wall through large orifices called "milk wells". The size of these indicate their carrying capacity. If they are large it indicates that a large amount of blood is passing through the udder and there is the opportunity for a large milk secretion. The milk wells should be large. Their size is a true measure of the milk vein. If the end of the vein is forked we may have two or three milk wells. This is desirable.

Rump. The shape and attachment of the udder is largely determined by the conformation of the rump of the cow. The length of the udder is determined by the length of the rump—a short rump, a short udder. A drooping rump naturally is accompanied by an udder with under-developed forequarters. If a cow is narrow at the pins she cannot have as much room in the twist for a highly attached and wide udder.

Dairy Temperament. Dairy temperament is an absolute essential in a dairy cow. In regards to constitution and capacity, the beef and the dairy cow are much alike. The beef animal has a disposition to make flesh, while the dairy animal has a tendency to make milk. This dairy temperament is shown in many ways: natural leanness throughout, long head from the eyes down, clean cut about the face, broad forehead—somewhat dished (this shows good breeding), eyes full and prominent, and the neck long and lean. The dairy cow must show everywhere a freedom from meat carrying tendencies, so a light loin, a thin thigh and an open twist are always sought, as well as an open jointed back bone.

Quality of Hair and Hide, and Quality of Bone. The skin should be loose and fairly thin. It should be such that one could pick up a handful on the last rib. A heavy skin that lies tightly indicates an excess of fibrous tissue. It is accompanied by coarse hair, and these two things are seldom found in a highly efficient dairy cow. The hair should be fine, short and oily. The bone should be smooth and fine. Fine shanks and skins, fine loins, fineness of horn and freedom from grossness in the shoulder or hooks, and fineness of the tail are all indicative of the correct quality of bone. A cow that is coarse in these parts is almost certain to give less returns in milk for the amount of feed consumed.

Size. Within each breed, size is very important. First, because a large cow occupies very little more space in the dairy than does a smaller one; second, because a large cow is usually a more efficient machine for the production of milk than the smaller cow; and third, because when the productive days of a cow are over the large cow can be salvaged to better advantage through the meat markets than can the smaller cow. Every effort should be made to have the dairy cow as large, or larger, than the average for the particular breed which she represents.

Appearance. Every animal should have a straight, strong top-line. It adds to the appearance, and beauty helps to find a market for almost everything. Weakness in the middle of the back and drooping rump are objected to. A cow with a weak back, tires more easily and is a less useful cow. The dairy cow should be low-set. This is not so much a matter of long or short legs as it is of body depth. The high-set cow has a shallow body and is a slower maturing type. She is also harder to feed properly. The low-set cow is low-set because her body is deep and her chest is well let down between her forelegs. Style is very important. A cow should be stylish—she should carry her head erect, walk in a dignified manner and be active. In standing, a cow pleases most when her legs are placed accurately beneath her. That correctness should always be sought. Her total length must be proportionate to her depth and width. All parts must be in harmony. The length of neck, body and rump must be proportionate. Proportion is as essential in the appearance of a cow as it is in man.

Heifers. Not much need be said regarding the judging of dairy heifers. The requirements in milch cows are sought in heifers—capacity, constitution, mammary system, rump formation, dairy temperament, quality of hair and hide, quality of bone, size and appearance—and it is astonishing how the characteristics of the mature cow are foreshadowed in the calf.

The good dairyman loves his cattle. They are always on his mind. By day he works for them, in his leisure he talks of them and at night they fill his dreams. He spends his rainy days in the cow stable, and to the man who continues to study cattle, new facts concerning them are constantly revealed.

MIDDLE ATLANTIC STATES MARKETING OFFICIALS MEET

Marketing requirements as a factor in production programs, was the general theme of the Fourth Annual Conference of the Middle Atlantic States Marketing Officials which held an all day meeting in the Philadelphia headquarters of the Federal Bureau of Agricultural Economics, on Wednesday, March 18, 1925.

The meeting which was very well attended by representatives and officials was presided over by Alexis L. Clark, of Trenton, N. J., president of the body.

The morning session was addressed by Dr. C. W. Werburton, Director of Extension Work, United States Department of Agriculture.

Local production and consumption surveys were discussed by R. B. Dunlap, A. C. Berger, A. R. Eldred and others.

The subject was also discussed by A. C. Waller, Federal Bureau of Agricultural Economics.

"Standards for Eastern Beef Production" were discussed by C. V. Whaltin, of the Federal Bureau of Agriculture and others.

At the afternoon session, Ellwood Douglass, Mercer County, N. J., made an address on "Adjusting the New Jersey Potato Industry to Market Requirements."

Dr. M. A. Jull, Senior Poultry Husbandman Federal Bureau of Animal Industry made an address on the "Adjusting of Poultry Breeding Business to Meet Changing Demands." "Poultry Registration, Certification, Accreditation, etc.," was discussed in ten minute talks by Ray G. Jones, Extension Poultry Specialist, Connecticut State Agricultural College; E., J. Lawless, Pennsylvania Bureau of Markets; Paul B. Bennetch, New Jersey Bureau of Markets and Prof. Powell, of Cornell University, Robert B. Slocum, Federal Bureau of Agricultural Economics, presented a proposed "Program of Egg Standardization"; Prof. F. B Bomberger, Maryland State Agricultural College made an address on "Market Preferment as a Final Objective in the Agricultural Production Enterprizes."

The Evening Session

"Measuring Market Requirements", a topic of exceptional importance was discussed by William P. Hedden, of the "Port of New York Authorities" who discussed the surveys made in the supply of vegetable products for consumption in the Metropolitan area.

Dr. J. Clyde Marquis, of the U. S. Department of Agricultural Economics, discussed the recent survey of milk consumption in the city of Philadelphia and suburban districts, which he said was extremely valuable from the view-point in modeling future plans and publicity in connection with the popular demand.

"Recent Progress in Meeting Milk Market Demands" was considered and discussed by Dr. H. A. Ross, New York State Agricultural College.

"Supply and demand in milk production can be best adjusted at the source. The Inter-State Milk Producers' Association, has made great strides in its work of adjusting production to meet the demand."

He showed from the surveys made by him in the Chicago market that the probable consumption of fluid milk can be closely estimated some time in advance. Dealers must plan to meet the consumptive fluctuations and carry sufficient surplus to cover this demand.

In addition to the usual Saturday and Sunday surplus, temperature and vacation periods show the widest variation in consumptive requirements.

R. W. Balderston, secretary of the Philadelphia Inter-State Dairy Council, spoke of the value of the consumer demand surveys. The recent survey in the Philadelphia district had resulted in material changes in the Dairy Council service to more closely conform with the demand shown by the result of the investigation."

DAIRYMEN, NOT OLEOMARGARINE MANUFACTURERS, ARE FRIENDS OF THE SOUTH*

By M. D. MUNN, President National Dairy Council

Recent associated press dispatches, published in the daily press of the country, state that the Southern states have been urged by a group of governors to unite in opposition to the passage of various state legislation, the purpose of which is to prevent oleomargarine manufacturers from using dairy terms, such as "cows", "cream," "milk" and other generic dairy terms, for the evident purpose of creating in the public mind the impression that oleomargarine is a dairy product. Such legislation also requiring those selling oleomargarine in stores or supplying it for the table in hotels, restaurants and other public eating places to display notices stating that oleomargarine is sold or served in such places, and in some instances such legislation requiring that a license be taken out by anyone selling oleomargarine within the state. The opposition of these governors of Southern states, which the article states are ten in number, is based on the claim that such legislation would tax oleomargarine in a manner that would seriously impair the cottonseed oil industry and result in great damage and loss to the cotton growers of the South.

From this article thus published broadcast by the associated press, it is evident that someone is trying to arouse the cotton growers of the South to aid some particular selfish interest in defeating legislation which would compel straightforward, legitimate conduct on the part of certain manufacturers, sellers and users of oleomargarine.

From information coming to the National Dairy Council, we believe that this effort to secure official opposition to legislation regulating and controlling the manufacture and sale of oleomargarine is started and supported by oleomargarine manufacturers; and that they are endeavoring to arouse this opposition upon either misrepresentation of facts or a lack of knowledge of the real facts as to what effect, if any, such legislation will have upon cotton growers of the South.

Let us see what the real facts are. According to the annual report of the Internal Revenue Department of the federal government for the fiscal year ending June 30, 1924, there was used in the manufacture of oleomargarine in this country 294,700,000 pounds of various kinds of oils. Of these oils the largest amount was coconut oil, and in the manufacture of oleomargarine only about 16 per cent. of these oils was cottonseed oil. The value of this cottonseed oil thus in the manufacture of oleomargarine to the cotton growers in the South was less than two and one-half million dollars; that during the same period, during which the oleomargarine manufacturers of this country used this small amount of cottonseed oil in the manufacture of oleomargarine, the dairy farmers of the dairy sections of this country, and in whose interest this legislation is asked, paid to the cotton growers of the South for cottonseed meal and cottonseed cake together with cottonseed hulls to feed their dairy cows, more than $38,000,000, or nearly twenty times as much as the manufacturers of oleomargarine who would be affected by such legislation, paid for the small quantity of cottonseed oil used in the manufacture of oleomargarine.

From these figures it would appear that the real benefactors of the cotton growers in the use of their by-products are the dairy farmers of this country, and not the oleomargarine manufacturers; and that these cotton growers should be cooperating with the dairy farmers of this country in an effort to protect the dairy industry by properly regulating the manufacture and sale of oleomargarine rather than to be influenced by misinformed official action in opposition to such legislation.

As the dairy industry develops, and more milk and dairy products are consumed, so much more will cotton-seed meal and other by-products of the cottonseed be in demand and used by the dairy farmers of this country. It is directly in the interests of the cotton growers of the South to help develop the dairy industry as a means of more extended use of these by-products, and not retard its development by supporting efforts to defeat legislation which protects the dairy industry against the action and invasions of the manufacturers of oleomargarine who are using so much of coconut oil and products from foreign countries and islands, and so little of cottonseed oil in the manufacture of oleomargarine.

The manufacturers of oleomargarine have for years attempted to use the influence of the cotton growers of the South to further their ends in relation to a tariff on foreign oils, but also in relation to any effort to properly regulate and control the manufacture and sale of oleomargarine.

It is high time that the intelligent growers of cotton in the Southern states should know the facts and realize where their real interests lie. The present agitation among Southern governors to oppose this legislation is only another evidence of how certain manufacturers of oleomargarine are endeavoring to mislead public opinion by slimy pretense as to proper and necessary regulation of their conduct.

The dairy industry is compelled to exercise eternal vigilance and concerted opposition to various forms of misleading advertisements and publicity by certain manufacturers of oleomargarine whose product is made largely from coconut and other foreign oils, and this legislation now being urged in various states is made necessary by reason of just such conduct on their part.

The dairy industry is not opposing the sale of oleomargarine for just what it is and in its natural state, but the manufacturers of this product have so often attempted, and are now attempting, to sell it under the guise of butter or a dairy product or, in other words, as a counterfeit of butter, that the dairy industry is compelled not only in its own interests, but to protect the consuming public against this conduct, to support such legislation.

**Reprint from the Butter, Cheese and Egg Journal, Milwaukee, Wisconsin.*

CROP VALUES HIGHER BUT LIVESTOCK LOWER LAST YEAR

DAIRY PRODUCTS DECLINE

The combined value of crop and livestock production in the United States last year was $12,404,000,000 which was $56,000,000 more than in 1923 when the total value was $12,348,000,000, according to estimates by the United States Department of Agriculture.

The higher figures for last year are due to the increased value of crops over the preceding year, inasmuch as the value of livestock production shows a decline.

Crop production had a farm value of $11,404,000,000 compared with $10,401,000,000 in 1923, but of this value some $4,951,000,000 worth of crops were fed to livestock whereas in 1923 the value of crops fed to livestock was $4,286,000,000.

Livestock and livestock products are given a farm value of $5,951,000,000 compared with $6,233,000,000 the preceding year, nearly all animal products having decreased in value.

Weighted prices have been used in estimating the value of nearly every crop and animal product, so that the figures are more nearly representative of the prices that farmers received than in previous years when the figures were based mostly on December 1 prices. The department points out also that the gross value of either crops or animal products last year was exceeded only in the years 1917 to 1920 inclusive.

The value of the cereal crops in 1924 was $5,220,000,000 or 45.8 per cent. of the total of all crops, as compared with $4,138,000,000 in 1923 or 39.8 per cent. of the value of all crops in that year. Every cereal crop increased in value last year.

The value of the corn crop last year is placed at $2,890,000,000 as compared with $2,538,000,000 in 1923; wheat $1,131,000,000 compared with $743,000,000 and oats $799,000,000 compared with $554,000,000.

The cotton crop, including lint and seed, is valued at $1,701,000,000 last year compared with $1,657,000,000 in 1923. This increased value was due to larger production inasmuch as the average price per pound of cotton lint was lower than for the preceding year.

Hay and forage crops are given a value of $1,733,000,000 compared with $1,619,000,000 in 1923; the fruit crops $626,000,000 compared with $642,000,000; vegetables $1,018,000,000 compared with $1,169,000,000.

Nearly all animal products declined in value as compared with 1923; the value of dairy products being $2,586,000,000 against $2,652,000,000 the preceding year; animals raised $2,267,000,000 compared with $2,440,000,000, and poultry products $994,000,000 compared with $1,038,000,000.

Dairy Products Decrease

A decrease of $66,000,000 in the farm value of dairy products was noted by the survey, the gross value for 1924 being $2,586,148,000.

The decrease is attributed to lower prices for all farm dairy products except buttermilk, whey, and skim milk.

Whole milk sold and consumed on farms last year was valued at $1,714,000,000 compared with $1,750,000,000 in 1923; butterfat $394,000,000 compared with $415,000,000, and butter made on farms $237,000,000 compared with $246,000,000.

The average of prices received by farmers for milk sold for all purposes was 5.225 cents a quart in 1924; 5.547 cents in 1923, and 4.73 cents in 1922.

MORE SILOS NEEDED

A. L. HAECKER

Dairying is our largest branch of agriculture, and we must see to it that it survives. We cannot afford to surrender the field to competitors. Two and one-half billion dollars are paid for dairy products annually to producers in this country. The industry furnishes cash throughout the year; steady employment for old and young; it utilizes the cheap, raw material of the farm, adds fertility to the land, and promotes frugal and industrious habits, all of which are beneficial to all our people.

The American dairy farmer can compete successfully with his foreign competitor providing he uses good dairy cows and feeds them economically. We have the advantage of a cheaper and better supply of raw material, such as forage and grains; we have a more fertile soil and a much cheaper method of tillage. We need not worry over competing with any country providing we use modern, economical methods, among which the silo certainly is one of the most important.

A good many states have expressed the ambition to become prominent in dairy production. It is a commendable idea, but it cannot be accomplished without a thorough understanding of economic production. Wisconsin, the greatest dairy state, discovered many years ago that the silo, legume hay and good dairy cows were all necessary in making a profitable dairy business. Today, Wisconsin has over 100,000 silos and still they are the largest buyers of this important farm equipment.

This country has recently turned from a butter importing to an exporting nation. We now have a large surplus of butter, and are forced to market some of it in foreign lands. As there is a duty of 8 cents on imported butter, we have lost 10 cents per pound counting all costs in changing from importing to exporting, and this has largely fallen upon the producer. Experiments and tests have proven that the silo will save 10 cents or more on the cost of producing a pound of butter; the dairy farmer who lacks a silo has no chance to save this 10 cent loss.

Over one-half million silos are now in use in the U. S., but still we are only 20 per cent. supplied. As the silo has proven an important factor in the economic production of stock and stock products, we should put it to a larger use.

INTERSTATE MILK PRODUCERS REVIEW

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Editorial

What is really being done by the Quality Control Department of the Philadelphia Inter-State Dairy Council, is definitely shown in a statement printed in another column.

The "clean-up" work in the Philadelphia Milk Shed is a real one.

There is no half way measures in this work. The splendid co-operation of the participating dealers has made this work possible.

There has been and is one definite policy—the milk supply must be cleaned up, not only on the farms but at receiving stations and distribution plants.

The work is progressing very satisfactorily. The producers themselves realize that a safe and regulated milk supply is a very dominant factor in the sale of their milk and its consumption by the public.

Nearly 16,000 permits have been issued to producers and distributors. The work of inspection is a tremendous one. It involves a visit, not only once but twice, three times and in some instances many more, to insure, that not only the necessary improvements have been made, but that these improvements be continued and dairy barns and plants be constantly maintained in a clean and sanitary manner.

The milk supply of the co-operating farmers and distributors is in far better condition than it was a year ago and the consumption of fluid milk is increasing.

If the public is given a clean, safe, swect, and sanitary milk supply—there is no question about it, they will use more milk.

BUTTER PRODUCTION SHOWS INCREASE

Butter production in the United States increased nearly 35,000,000 pounds during the first nine months of 1924 when production reached 1,045,260,000 pounds as compared with 1,010,754,000 pounds during the corresponding period in 1923, according to reports compiled by the United States Department of Agriculture.

The increase occurred mainly during July, August, and September during which period production was 396,455,000 pounds as compared with 371,353,000 pounds during the corresponding period in 1923. Production during the first three months of the year was about the same as in 1923, but the following three months showed a slight decrease.

The ice cream industry was affected by the cool weather most of the year. Production up to April was about the same as during the preceding year, but fell off during the remainder of the nine months. Production for the nine months period was 152,277,000 gallons as compared with 156,305,000 gallons in 1923.

Production of cheese was 312,596,000 pounds as compared with 314,358,000 pounds in 1923. Production at the beginning of the year was heavier than in 1923, but declined during the second quarter, and remained slightly under the 1923 production through the third quarter.

Production of condensed and evaporated milk reached 1,413,570,000 pounds during the nine months' period in 1924 as compared with 1,433,398,000 in 1923. More than 288,000,000 pounds was produced in February and March alone as compared with 240,000,000 pounds in the same months the preceding year, but production during the following six months fell under that in 1923.

OLEOMAGARINE ACT

An effort has been made to break down the present efficient oleomargarine regulation in the State of Pennsylvania.

After considerable effort, however, the present regulatory measures of the present act have been maintained.

The new bill (H. R. 1155) as adopted by the Committee on Public Health and Sanitation, while carrying all the old features of the present law, does reduce the license fee of retailers from $100 to $50 annually.

This is not desirable. It may open a flood of new licenses, unfamiliar with the present act and may result in even greater violations and permit unscrupulous merchants to dispose of oleomargarine for and as butter.

The bill should remain in its present state, which has proved highly satisfactory for a number of years.

A GOOD INVESTMENT

One of the first tangible results of the Rural Electric Investigation now being carried on by the Pennsylvania Public Service Commission is a reduction of over 10% in the rates of the Philadelphia Suburban Gas and Electric Company serving rural territory in Chester, Montgomery and Bucks Counties. This means a saving of many thousands of dollars annually to present customers. It also means increased revenues to the company through increased consumption and new customers. It is only a beginning. Further reductions in rates throughout Pennsylvania will follow.

The Rural Electric Committee of the State Council of Agricultural Organizations represents you in the investigation. It has spent less than $3000 so far. It needs $10,000 to finish the job. A contribution to it is a good investment. Get your local to contribute. Send your individual subscription to H. D. Allebach, Treasurer, Boyertown Building, Philadelphia, Pa.

QUALITY CONTROL DEPARTMENT STATISTICS

Record of One Receiving Station

The following record shows the result of the work of the Quality Control Department of the Philadelphia Inter-State Dairy Council at one receiving station.

	On First Inspec'n	On Re-Inspec'n
No. inspections made	264	235
No. patrons holding temporary permit	226	129
No. patrons holding permanent permit	38	106
No. patrons having a milk house	92	178
No. patrons having no milk house	172	57
Barn Conditions		
No. rated as "Good"	89	180
No. rated as "Fair"	141	48
No. rated as "Poor"	34	7

Only one patron has been discontinued from this receiving station because of refusal to meet the Regulations. Since the first inspection 28 men have stopped selling—some at the request of the plant manager, some have gone out of the milk business, some have moved, etc. Seventy-two third inspections are included in the above number of reinspections.

Plant No. 2

33 patrons out of 128 had milk houses before inspection work started.

62 milk houses have been built as a result of inspections.

33 patrons still do not have milk houses.

72 patrons out of 128 now hold permanent permits.

1 man has been shut off for refusal to meet the Regulations.

Plant No. 3

60 patrons out of 242 had milk houses before inspections started.

118 milk houses have been built as a result of inspections.

64 partons do not yet have milk houses.

103 partons out of 242 hold permanent permits.

6 men have been shut off for failure to meet Regulations.

DIRECTORS' MEETING

At a meeting of the executive committee of the Board of Directors of the Inter-State Milk Producers' Association, it was decided to hold the next meeting of the Board of Directors on Monday, April 27th. The meeting will be held in the offices of the association, Boyertown Building, Philadelphia, Pa., beginning at 9.30 A. M.

ELECTRIC WIRING INSURANCE

Your interest is called to the fact that, should you desire to install electrical current in your home on the farm, or other buildings, that wiring must be done with the approval of the Fire Insurance Underwriters.

This wiring may be done in accordance with the suggestions for rural house wiring described in an article prepared by George H. Morris, in the Giant Power Survey Report, page 258. This, we are advised, will be approved by the Fire Insurance Underwriters' Association.

Some meat is good for everyone,
Fruit promotes the health,
Bread is called the staff of life,
"But milk is life itself."

Before planning to increase production, make sure that the product can be sold.

Statement of the ownership, management, circulation, etc., required by the Act of August 24, 1912, of the Inter State Milk Producers' Review, published monthly at West Chester, Pa.

Editor, August A. Miller, Brookline, Delaware county, Pa.; Business Managers, August A. Miller, Brookline, Delaware county, Pa.; Frederick Shangle, Trenton, New Jersey; Publisher, Inter-State Milk Producers' Association, Philadelphia, Pa.

Owners: (If a corporation, give its name and the names and addresses of stockholders holding 1 per cent. or more of total amount of stock. If not a corporation, give names and addresses of individual owners). Inter-State Milk Producers' Association, H. D. Allebach, Trappe, Pa.; F. P. Willits, Ward, Pa.; F. Shangle, Trenton, N. J.; A. P. Waddington, Woodstown, N. J.; E. Nelson James, Rising Sun, Md.; R. W. Balderston, Media, Pa.; August A. Miller, Brookline, Pa.; E. H. Donovan, Brenford, Delaware; and 20,400 others.

Known bond holders, mortgages and other security holders, holding 1 per cent. or more of total amount of bonds, mortgages, or other securities: (If there are none, so state.) None.

Average number of copies of each issue of this publication sold or distributed, through the mails or otherwise to paid subscribers during the six months preceding the date shown above. (This information is required from daily newspapers only.)

AUGUST A. MILLER.

Sworn to and subscribed before me this 25th day of March, 1925.

W. H. Henderson
Notary Public
My commission expires March 27, 1927.

LATEST MARKET PRICES

PHILADELPHIA SELLING PLAN

The basic and surplus provisions of the Philadelphia Selling Plan again became effective with January, 1925. The basic quantity is represented by the average monthly shipment of milk during October, November and December, 1924.

Beginning with January, milk will be paid for by co-operating dealers on the basic and surplus plan. Milk shipped in excess of the basic quantity and equal to it in amount, will be paid for on the average New York, 92 score butter, solid pack, price for the month, plus 20 per cent. Milk in excess of the amount equal to the basic quantity will be paid for on a flat average New York, 92 score, solid pack, butter price for the month.

INTER-STATE MILK PRODUCERS ASSOCIATION PRICES

Prices are based on 3 per cent. butterfat milk, with a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down.

This price list is issued with the understanding it is net to the producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contribution and payments:

(1) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk purchased from other producers at price listed hereon.

(2) To the Inter-State Milk Producers Association 2 cents per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2 cents per 100 pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stablization of markets, and for an educational campaign advertising the food value of dairy products.

Prices subject to change whenever warranted by market conditions.

MARCH BASIC PRICE
F. O. B. Philadelphia
GRADE B MARKET MILK

Test per cent.	Basic Quantity per 100 lb.	Price per qt.
3.	$2.94	6.3
3.05	2.96	6.35
3.1	2.98	6.4
3.15	3.00	6.45
3.2	3.02	6.5
3.25	3.04	6.5
3.3	3.06	6.55
3.35	3.08	6.6
3.4	3.10	6.65
3.5	3.14	6.75
3.55	3.16	6.75
3.6	3.18	6.8
3.65	3.20	6.85
3.7	3.22	6.9
3.75	3.24	6.95
3.8	3.26	7.
3.85	3.28	7.05
3.9	3.30	7.05
3.95	3.32	7.1
4.	3.34	7.15
4.05	3.36	7.2
4.1	3.38	7.25
4.15	3.40	7.3
4.2	3.42	7.3
4.25	3.44	7.35
4.3	3.46	7.4
4.35	3.48	7.45
4.4	3.50	7.5
4.45	3.52	7.55
4.5	3.54	7.6
4.55	3.56	7.65
4.6	3.58	7.7
4.65	3.60	7.7
4.7	3.62	7.75
4.8	3.66	7.85
4.85	3.66	7.85
4.85	3.68	7.9
4.9	3.70	7.95
4.95	3.72	8.
5.	3.74	8.

When milk is not tested, the price f. o. b. Philadelphia is 7¼ cents per quart.

MARCH SURPLUS PRICE
F. O. B. Philadelphia

Test per cent.	Class I Per 100 lbs.	Class I Per qt.	Class II Per 100 lbs.	Class II Per qt.
3.	$2.43	5.2	$2.05	4.4
3.05	2.45	5.25	2.07	4.45
3.1	2.47	5.3	2.09	4.5
3.15	2.49	5.35	2.11	4.55
3.2	2.51	5.4	2.13	4.6
3.25	2.53	5.4	2.15	4.6
3.3	2.55	5.45	2.17	4.65
3.35	2.57	5.5	2.19	4.7
3.4	2.59	5.55	2.21	4.75
3.45	2.61	5.6	2.23	4.8
3.5	2.63	5.65	2.25	4.8
3.55	2.65	5.65	2.27	4.85
3.6	2.67	5.7	2.29	4.9
3.65	2.69	5.75	231	4.95
3.7	2.71	5.8	2.33	5.
3.75	2.73	5.85	2.35	5.
3.8	2.75	5.9	2.37	5.05
3.85	2.77	5.95	2.39	5.1
3.9	2.79	6.	2.41	5.15
3.95	2.81	6.	2.43	5.2
4.	2.83	6.05	2.45	5.25
4.05	2.85	6.1	2.47	5.3
4.1	2.87	6.15	2.49	5.35
4.15	2.89	6.2	2.51	5.4
4.2	2.91	6.25	2.53	5.4
4.25	2.93	6.3	2.55	5.45
4.3	2.95	6.3	2.57	5.5
4.35	2.97	6.35	2.59	5.55
4.4	2.99	6.4	2.61	5.6
4.45	3.01	6.45	2.63	5.65
4.5	3.03	6.5	2.65	5.7
4.55	3.05	6.55	2.67	5.7
4.6	3.07	6.6	2.69	5.75
4.65	3.09	6.6	2.71	5.8
4.7	3.11	6.65	2.73	5.85
4.75	3.13	6.7	2.75	5.9
4.8	3.15	6.75	2.77	5.95
4.85	3.17	6.8	2.79	6.
4.9	3.19	6.85	2.81	6.
4.95	3.21	6.9	2.83	6.05
5.	3.23	6.95	2.85	6.1

APRIL PRICES
F. O. B. Philadelphia
Country Stations

The same prices for basic milk as quoted above for March apply in April, subject however, to change whenever warranted by market conditions.

MARCH BASIC PRICE
Country Receiving Station
GRADE B MARKET MILK

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Miles	Basic Quantity Freight Rates 100 lbs.	Price 3% milk
1 to 10 incl.	.268	2.44
11 to 20 "	.283	2.43
21 to 30 "	.303	2.41
31 to 40 "	.313	2.40
41 to 50 "	.333	2.38
51 to 60 "	.343	2.37
61 to 70 "	.364	2.34
71 to 80 "	.374	2.33
81 to 90 "	.389	2.32
91 to 100 "	.399	2.31
101 to 110 "	.414	2.29
111 to 120 "	.424	2.23
121 to 130 "	.434	2.27
131 to 140 "	.450	2.26
141 to 150 "	.460	2.25
151 to 160 "	.475	2.23
161 to 170 "	.480	2.22
171 to 180 "	.490	2.21
181 to 190 "	.505	2.20
191 to 200 "	.510	2.20
201 to 210 "	.520	2.19
211 to 220 "	.535	2.17
221 to 230 "	.540	2.17
231 to 240 "	.550	2.16
241 to 250 "	.556	2.16
251 to 260 "	.566	2.14
261 to 270 "	.576	2.13
271 to 280 "	.581	2.13
281 to 290 "	.596	2.11
291 to 300 "	.600	2.11

MARCH SURPLUS PRICE
At Receiving Stations

Test	Class I per 100 lbs.	Test	Class II per 100 lbs.
3.	$1.85	3.	$1.47
3.05	1.87	3.05	1.49
3.1	1.89	3.1	1.51
3.15	1.91	3.15	1.53
3.2	1.93	3.2	1.55
3.25	1.95	3.25	1.57
3.3	1.97	3.3	1.59
3.35	1.99	3.35	1.61
3.4	2.01	3.4	1.63
3.45	2.03	3.45	1.65
3.5	2.05	3.5	1.67
3.55	2.07	3.55	1.69
3.6	2.09	3.6	1.71
3.65	2.11	3.65	1.73
3.7	2.13	3.7	1.75
3.75	2.15	3.75	1.77
3.8	2.17	3.8	1.79
3.85	2.19	3.85	1.81
3.9	2.21	3.9	1.83
3.95	2.23	3.95	1.85
4.	2.25	4.	1.87
4.05	2.27	4.05	1.89
4.1	2.29	4.1	1.91
4.15	2.31	4.15	1.93
4.2	2.33	4.2	1.95
4.25	2.35	4.25	1.97
4.3	2.37	4.3	1.99
4.35	239	4.35	2.01
4.4	2.41	4.4	2.03
4.45	2.43	4.45	2.05
4.5	2.45	4.5	2.07
4.55	2.47	4.55	2.09
4.6	2.49	4.6	2.11
4.65	2.51	4.65	2.13
4.7	2.53	4.7	2.15
4.75	2.55	4.75	2.17
4.8	2.57	4.8	2.19
4.85	2.59	4.85	2.21
4.9	2.61	4.9	2.23
4.95	2.63	4.95	2.25
5.	2.65	5.	2.27

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3% butterfat

	F. O. B. per quart Phila.	Receiving station 50 mile one per cwt.
1924		
January	6.35	2.39
February	6.3	2.37
March	6.3	2.37
April	6.3	2.37
May	6.3	2.37
June	6.3	2.37
July	6.3	2.37
August	6.3	2.37
September	6.3	2.37
October	6.3	2.37
November	6.3	2.37
December	6.3	2.37
1925		
January	6.3	2.37
February	6.3	2.37
March	6.3	2.37

Do This To Stop Losses From

SCOURS—ABORTION RETAINED AFTERBIRTH

Let Peter Shallow, of Oconto, Wisconsin, tell you how he has stopped disease losses in his herd. He used to have the same trouble that most farmers have. Now he has no aborters, no cows that don't clean, no scours, none of these losses at all. Read his letter.

B-K Did the Work

"Abortion had pretty well set in my herd of Guernsey cattle before I knew what I was up against. After losing 11 calves I got busy and bought a supply of B-K. I treated those that had aborted as well as those that were yet with calf. All those that were due to calve later than 100 days came out healthly. I know B-K did the work."

Has Never Failed

"I also used it for nflamest thing out for cows that do not clean readily after calving. This is a job I always had to do by hand. Now I use B-K by injecting about a gallon of water mixed with B-K. This has never failed."

"I also used t for inflammation of womb in cows and two injections 2 hours apart did the work. I couldn't do without it now."

Money Back Guarantee

There's the story of one farmer. Thousands have had the same wonderful results. B-K is the greatest and safest germ killer on the market. Nothing like it for scours, abortion, and retained afterbirth has ever been found. It will pay you to get all the facts about this amazing disease treatment. Send the coupon now for the free bulletins. They will save you thousands of dollars. You can get B-K from any good dealer, on our money back guarantee. Just try it at our risk.

General Laboratories
Dept. 25M
Madison, Wisconsin

Please send FREE & POSTPAID your valuable bulletins telling how to clean up quickly in CALF SCOURS-No. 136H, RETAINED AFTERBIRTH-No. 756, ABORTION-No. 52K

Name .....

Address .....

MARCH BUTTER PRICES
92 Score, Solid Packed

	Philadelphia	New York	Chicago
2	45	45	44 1/2
3	46 1/2	46	45
4	47	46 1/2	45 1/2
5	47 1/2	47	46 1/2
6	48 1/2	47 1/2	47 1/2
7	48 1/2	48 1/2	48 1/2
9	49	49	49
10	50	49	50
11	50	49	50
12	49	48 1/2	49
13	49	48	48
14	49	48	48 1/2
16	49 1/2	49	48
17	50	49	48 3/4
18	49 1/2	48 1/2	49
19	49 1/4	48 1/4	48 1/2
20	49	47 3/4	48
21	49	47 3/4	48 1/2
23	49	47 3/4	48 1/2
24	49	47 3/4	48 1/2
25	48	47	48 1/2
26	47 1/2	47	47 1/2
27	46 1/2	45	45 3/4
28	—	45 1/2	—
30	47 1/2	46 1/2	47
31	47 1/2	46 1/2	45 1/2

Only three other junior three-year-old Holstein cows in the United States have exceeded the yearly butter production record made recently by Pennsylvania's new champion of this class. This new dairy queen is Wynola Tobe Pontiac Lass, owned by A. S .Deysher, of Reading. Under the supervision of the Pennsylvania State College of Agriculture, this cow completed her 365 day test period with 23,498.2 pounds milk and 949.43 pounds butterfat (1,186.7 pounds butter), according to the advanced registry department of The Holstein-Friesian Association of America.

She is the daughter of the present herd sire on this farm, who has two other daughters, each having recently produced over 31 pounds of butter in seven days as senior two-year-olds.

OFF FLAVORS AND ODORS OF MILK FROM FEED

When cows are fed such succulent feed as cabbage, potatoes, green alfalfa, green corn, turnips, and silage, there is liable to be some noticeable flavor in the milk unless precautions are taken, says the United States Department of Agriculture. A great deal of experimental work has been done in the use of these feeds, and certain practices have been found desirable and practicable. The important facts brought out were as follows:

Feeding succulent feed before milking is likely to impart an undesirable flavor and odor to the milk.

The longer the time elapsing between feeding and milking the less pronounced will be the undesirable flavors and odors.

Feeding succulent feeds immediately after milking has little or no detrimental effect.

Prompt and thorough aeration of milk while still warm will remove slight flavors and odors and will lessen the intensity of strong flavors and odors.

The department's market milk specialists say that feeds may be one of the most frequent causes of abnormal flavors and odors in milk, and for that reason the feeding of the succulent feeds listed above should be done very carefully.

Sometimes the appearance of feed flavor or odor in milk alarms the consumer, and it may be to the interest of the producer or distributor to acquaint the public with the cause.

INTERNATIONAL Special Dairy Feed is a GUARANTEED Extra Milk Producer

And Thousands of Dairymen Have Proved It!

Stop experimenting! Put your herd on a *proven* milk maker. If you want *more* milk, and at *less cost*, International Special Dairy Feed is your one best buy. One dairyman, with 16 cows, says that he increased his milk check $87 in 30 days by using Special Dairy instead of another feed, costing the same price. $87 a month is over $1,000 a year! Remember: no more feed, no more expense! Special Dairy was the complete answer.

The Secret of More Milk

is simple if you use Special Dairy. Protein, molasses and fat scientifically processed and combined in proper proportions provide the necessary nutrients and energy for maximum milk production. This great feed is digestible—cows eat it readily. You can bank on 20 extra quarts of milk from every sack of Special Dairy Feed as compared to using wheat feeds or ground grains. We guarantee this increase has been secured in hundreds of actual tests.

Try a Ton!

Do what thousands of other dairymen have done. Make a test on your own herd. That will prove to you that International Special Dairy Feed is the best feed on the market—best for your cows—best for your pocketbook. See your local dealer today and start making extra milk profits right away.

INTERNATIONAL SUGAR FEED CO.
Minneapolis, Minn.
Mills at Minneapolis and Memphis

Live Agents Wanted

With 2% Bone-Building Material

FREE

Write for a copy of our great book, "Feeding the Dairy Cow for Profit." It will pay you well.

Get Those 20 Extra Quarts

Dollars in your Pocket!

It *pays* to own a Craine Triple Wall Silo. Its three wall construction insures exceptional strength and durability! Once up you can forget it; no lugs or hoops to tighten. It makes good silage and *keeps it good!* You get more *beef* and *more milk* for less feed money.

You can rebuild your old stave silo into a handsome, strong, durable Craine. Our catalog is worth dollars to you. Write for it TODAY!

CRAINE SILO CO.
Box No. 230 Norwich N. Y.

CRAINE TRIPLE WALL SILOS
THE SILOS OF GIANT STRENGTH

KEEP FEEDING COWS

Feed dairy cattle well during the early spring months. Pastures will then yield a maximum production of milk and increase profits for the year.

Aunt Ada's Axioms: Nobody can be richer than you are in thoughts; and great thoughts bring more happiness than is brought by great wealth.

LEGISLATION IN PENNSYLVANIA OF INTEREST TO DAIRYMEN

A number of bills have been introduced in the present session of the legislature in the state of Pennsylvania, which are of particular interest to agriculture.

GIANT POWER BILL

A large group of bills have been introduced in the Legislature of Pennsylvania which have been prepared as a result of the work of the Giant Power Survery Board which was appointed by the Governor two years ago. These bills are of great economic importance to the people of the state in that they will help to so organize and develop the electric power of the state through great units of production and distribution that all the people of Pennsylvania can be served efficiently and economically.

Since the Giant Power plan is so vast, and since it is so new, no one expects that it will be completely enacted into law at once. But a number of the Giant Power bills are so clearly right and so obviously in the public interest that no reasonable objection can be made to their passage.

Quantity production and quantity transportation cheapen electric current as they cheapen goods. Therefore, the Giant Power plan propose to bring about: (1) A quantity production, by creating companies to operate Giant Power stations in or near the coalfields, first recovering from the coal the valuable by-products; (2) mass or quantity transportation, by giant lines operated by these giant power companies; and (3) what is called integration, by requiring all major transmission lines of other electric companies to take this current from the giant lines and deliver it to all distributing systems in the state that want it, without discrimination. This will, in effect, create a single system into which all current will be poured, by whatsoever company produced, and from which all consumers will be supplied. It will greatly reduce the cost of service.

Such a single system can be acheived only by giving new and large powers to the new giant power companies, and to the existing electric companies. The Giant Power plan therefore recommends that the degree and kinds of public control through the Public Service Commission shall be proportionately increased. It recommends also that the existing powers of state control of electric utilities shall be safeguarded through compacts with other states.

The Giant Power plan recommends that the farmers be authorized to form distribution systems for themselves in unserved territory and to take current for them from company lines at the cost of production and transmission plus a reasonable profit.

TUBERCULOSIS INDEMNITY

There are before the legislature several bills involving appropriations for indemnity in payment for condemned tuberculous cattle. It is hoped by the Department of Agriculture that, in the final analysis funds amounting to upwards of $2,000,000, will be available for the payment of such indemnities during the next two years. Much, however, will depend on the amount of money made available by the legislature to meet the full requirements of the administration budget, and other expenses of the state.

Agricultural interests of the State of Pennsylvania generally and dairy interests particularly made a strong plea before the Senate Committee on appropriations, in Harrisburg, Pa., for an adequate appropriation for tuberculosis cattle indemnity, during the next two years.

Nearly 400 people from different counties throughout the state were present, including a large representation of the members of the Inter-State Milk Producers Association from different counties in the Philadelphia Milk Shed.

The hearing was on the Haines bill, which originally carried an appropriation of $2,000,000, but which passed the House of Representatives reduced to $1,250,000. The necessity of an appropriation of $7,000,000 to take care of the indemnities believed necessary during the next four years was outlined and it was suggested that half that amount be appropriated for use during the next two years.

Morris P. Philips, president of the Pennsylvania State Federation of Agricultural Associations, presented briefly the demands for a satisfactory appropriation and introduced the various speakers.

Dr. T. E. Munce, of the Bureau of Animal Industry, outlined the work of the department in tubercular testing work. At this time applications are in hand for the testing of 240,536 cattle or approximately 16 per cent. of the total Pennsylvania cattle population. This demand comes from 200 townships in 28 counties.

The owners of 21,030 cattle have filed applications for a tuberculin test under the Individual Accredited Herd Plan. A total of 216,358 cattle are waiting tuberculin test under both the Area and Individual Herd Plan.

As a result of the tuberculin testing of the above mentioned 216,358 cattle, it is estimated that 18,579 cattle will be condemned, payment for which require indemnities to the amount of $928,900.00.

In addition to the 216,358 cattle waiting test, we estimate that the owners of upward of 519,000 cattle will want their cattle tested during the next two years. When these cattle are tested probably 46,569 animals will react, which would require $2,328,500 for indemnities.

In other words, the voluntary demand for tubreculin testing between June 1, 1925, and May 31, 1927, will be 735,358 cattle of which 65,148 will react, and to pay for them $3,257,400.00 indemnity will be required.

E. B. Harshaw, Grove City, Pa., president of the State Bankers' Association; Dr. L. M. Thompson, president of the State Holstein-Fresian Association; E. B. Bayard, editor of the Stockman and Farmer and president of the Pennsylvania Breeders' Association; Wm. B. Griscom, of the Abbotts Alderney Dairies; Dr. C. H. Minor, Secretary of the State Department of Public Health; Philip H. Dewey, Master of the Pennsylvania State Grange; Mrs. J. Duncan Just, president of the Pennsylvania Federation of Women's Clubs and others made forceful pleas for a satisfactory appropriation to care for the demand for tubercular testing work.

The wide spread demand for tuberculin testing was aptly demonstrated by a roll-call of the counties of the state which indicated by their attendence at this hearing, the demand of the various localities, for the pressing need of an appropriation, sufficient to take care of the work.

MILK CONTAINER BILL

A bill (Senate 15), providing for the bottling by the distributor of all milk intended for sale by hotels, restaurants, lunch rooms, soda fountains or dining cars, has been passed by both branches of the legislature and has been signed by the Governor. It becomes effective in sixty days.

This bill will eliminate the sale to the restaurant customers of fluid bulk milk, of necessity of uncertain butterfat content when served, and assure butterfat content to all consumers.

TESTING, SAMPLING AND MILK WAYING

A bill, (Senate 959) has also been introduced, providing for licensed testers, samplers and weighers of fluid milk.

An old act covered only the testing of milk, but the present bill goes farther in that it involves the licensing of the weighers and samplers of milk and places them under the jurisdiction of the Department of Agriculture. Testers, weighers and samplers license fees have been fixed at $3.00 per annum. These fees are to be used for maintenance of inspectors by the Department of Agriculture. A permit is also to be issued to creameries, shipping stations, milk factories, cheese factories, ice cream factories an milk condensaries, for which a fee of $5.00 per annum is exacted.

OLEOMARGARINE BILL

A bill has been introduced in the House, (1155) by Patrick Connor, representative from the 20th district, city of Philadelphia, which, in substance, removes all of the teeth from the present oleomargarine bill which has been on the statute books for over 15 years.

This present Pennsylvania Oleomargarine Act has been held up as a model act for the regulation and sale of oleomargarine in the United States. It has been thoroughly effective, and therefore apparently objectionable to the margarine interest.

The amendment proposed to eliminate the color regulations and oleomargarine could, under the bill, be colored to simulate butter and consumers would be unable to detect its nature when sold to them as butter.

It would eliminate the license to sell oleomargarine now required of retailers, hotels, restaurants, dining rooms, and boarding houses.

The tax of $1,000 and $500, by manufacturers and wholesalers, remains in the new bill, but, oleomargarine is not manufactured in Pennsylvania and wholesalers are very few.

A hearing was held on this bill on March 24th. Over 100 persons attended this hearing, members of the Grange, Inter-State Milk Producers' Association, The Dairymens' Co-operative Sales Co., Pittsburg, The Dairymen's League and many independent butter producers from nearby counties. The oleomargarine interests were represented largely by representatives from without the state. Dr. Abbott, Secretary of the Oleomargarine Institute, and others who had figured largely in the opposition to "Filled Milk" legislation in various states, predominated. It is uncertain, at this time as to what the action of the House Committee on Public Health and Sanitati n will do. Indications point toward its being reported out.

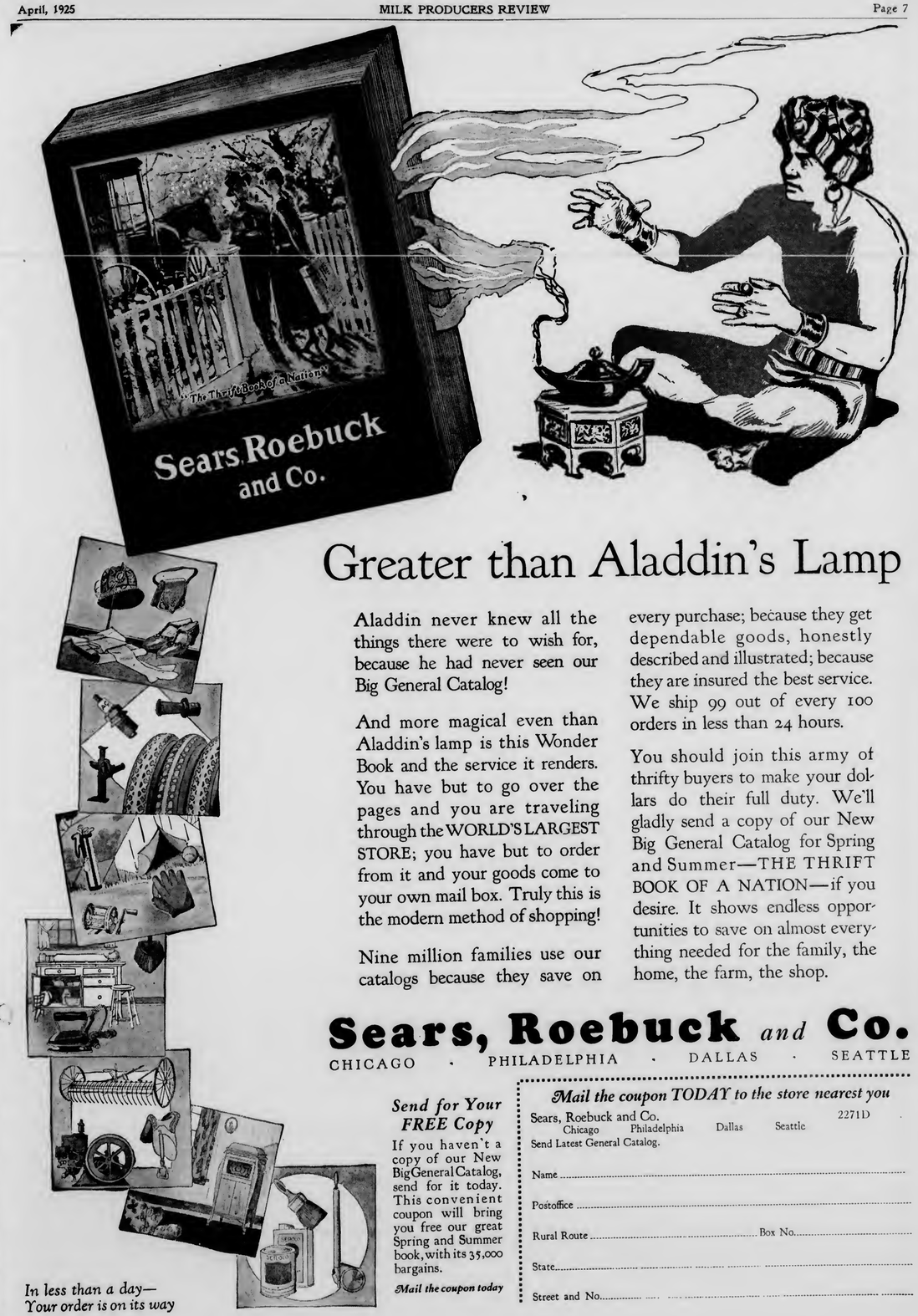
If the dairy interests are to have the protection of the Pennsylvania Oleomargarine bill, every effort must be made to defeat the proposed bill.

Note

This bill (H. R. 1155) has since been amended in committee.

It now retains the old original features of the present act, except, that the fee for retail licenses has been reduced to $50 annually, in place of $100.

The bill is still objectional, in that the low license fee will make it just that much easier for unscrupulous dealers to defraud the public by selling oleomargarine as and for butter.



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AN ELECTRIC FARM*

By George H. Morse

Electric Staff, Public Service Commission of Pennsylvania

Early in the evening Farmer Franklin and his family had listened to a talk on the present market conditions connected with the disposal of dairy products as it came in, loud and clear, over the radio. This had been followed by a lecture on cow testing in which even Mrs. Franklin and the children had taken considerable interest. Then came a one-act radio playlet which set them all laughing, and soon thereafter the room was suffused with the melodious strains of Beethoven's Minuet. At ten o'clock, Mr. Franklin turned on the switch which lighted the path to the barn and went to take a last look at a sheep about to lamb. An extension cord and lamp made it easy to carry out his examination. When this had been completed he turned on the exhaust fan for a few minutes, which left the building full of fresh clean air for the night. The Franklin dairy produced only the most sanitary milk.

Maximum Work With Minimum Energy

Returning to the house he had sought his bed chamber and was about to cuddle down under his blanket, when a slight disturbance among the fowl in the henhouse caught his ear. "Those chicken thieves again, I suppose," he ejaculated. "I guess they won't take a chance of being potted if I light her up." Reaching up to a point near the head of the bed he threw a switch which had been carefully arranged for such an emergency. Out in the barnyard there was a sudden glow and the henhouse stood out in sharp relief. Then he went to bed too tired to bother about thieves, reaching out to turn off the lights in the yard just before he went to sleep.

It wasn't necessary for the farmer to rise early the next morning. There was no hired hand to rouse, grumbling about wanting a job where he could sleep all night. A hired hand was no longer needed on this farm. Son Frank, upon graduation from the state agricultural college, had expressed a willingness to return to the farm if his father would put in modern improvements, including electricity, which would not only relieve them both of much unnecessary toil but add many comforts to their mode of living. A year of experience had now shown that the two of them were quite able to handle the farm without assistance other than that afforded by the electrical machinery and appliances which had been installed. Originally, when the project of electrifying the neighborhood was broached and the public utility representatives had explained that because of the widely scattered farms the utility would derive no reasonable return on the investment for a considerable period, and would therefore be unable to use its own funds without injuring its credit with its investors, the farmers had consented to furnish a part of the money required to build the line. For a time, Mr. Franklin had held back, considering it unjust that he should be asked to contribute three hundred dollars toward a line, title to which was to be given, out of hand, to the utility company. Frank, however, assured his father that his professors had taught that when a utility takes over a farm line and pays the taxes on it and maintains it indefinitely at its own expense, charging for service a rate which excludes interest on the investment, the farmers who put up a part or all of the money to build the line may be easily be better off if title is given over to the utility in consideration of its undertakings. When Mr. Franklin had been brought to this point of view he gave his best efforts toward securing the line and was instrumental in proving to his neighbors that, in holding out for the payment of damages for tree trimming and rights-of-way to pass their farms or cut across them, they were really biting off their noses to spite their faces, so to speak, and that they could hope to secure the line and reasonable rates for service only by showing greater willingness either to moderate or to do away altogether with such demands.

Preliminary showing that his bill for electric service would never be less than five dollars per month regardless of the amount of current consumed had rather staggered Mr. Franklin at first, but a year's experience had shown that after the electric range was installed, their monthly bill had amounted to nine or ten dollars. When this occurred they found that any additions to their electrical equipment had very little effect to increase the bill. For instance, an electric heater had proved too expensive to use at first. When the monthly bill was running about six dollars, several dollars were added, evidently owing to running the heater an hour or so on cold mornings. Later when the monthly bill had risen to nine dollars, because of having acquired a much larger number of electrical appliances in the house and about the farm, running the heater seemed to make very little difference, the same amount of service as formerly had from this device now being measured in cents rather than in dollars. This came about through the effect of the rate charged for electric energy, which rapidly became less as the quantity used became greater.

After the farm was electrified, Mr. Franklin and his son found the labor of milking twenty cows by means of the milking machine comparatively light, the task requiring only an hour while the machine was at work, one man was able to do other chores in and about the barn, such as disposing of the bedding, cleaning the water troughs, preparing the feed, and so forth.

Long before the farmer and his family had arisen in the morning a clock switch had turned on the light in the henhouses whereupon the cocks crowed as lustily as if welcoming the sun, and all the hens came down to scratch. Soon they were singing happily about the task of filling their crops, to the end that they could lay from 20 to 40 per cent more eggs in these winter months than they would otherwise.

Returns Justify Expenditures

Here is a list which Frank's professors prepared and gave him while he was a student in the class in agricultural engineering. It gives the probable monthly consumption of electric energy on the various types and sizes of farms named, for such uses as will be found economically desirable when current becomes available at a practicable, low rate and after the elapse of a sufficient length of time for the farmers to become acquainted with the real and varied utility of electric power.

Electric Power Used on a Dairy Farm
50 cows

	Kw.h.
Grain ground, per year, lbs. 70,000 at 1 kw.h. per. 100 cwt.	700
Hay, alfalfa or clover cut and elevated per year, lbs. 100,000 at 2 kw.h. per ton	100
Silage, lbs. 300,000 cut ¾" long, elevated 40 feet at ½ T per kw.h.	300
Water for cows, 182,500 gallons at 1 kw.h. per 1,000 gallons	182
Water for 8 horses, 40,000 gallons at 1 kw.h. per 1,000 gallons	40
Water for garden, lawns and washing automobile, 1,000 gallons	5
Water for pigs and young stock	10
Water for home (10 people) at 30 gallons—109,500 gallons	109
Ventilating fans in cow barns 500 hrs. at 2-3 kw	330
Cream separator, 10,000 lbs. of butter fat—260,000 lbs. milk. (Churn 200 batches of butter of 50 lbs. each—each batch takes ⅔ h.p. and requires ½ hour	42
Lighting of farmyard, barns and outbuildings	340
Lighting of farmhouse	200
Range	1,500
Fan (desk type)	16
Toaster	30
Sewing machine	17
Vacuum cleaner	50
Washing machine	50
Lighting in chicken house in winter	50
Electric iron	72
Milking machines	750
	4,893

Average—408 kw.h. per month.

	Kilowatt Hours Per Month
Dairy Farm:	
20 cows	265
50 cows	408
100 cows	880
Poultry Farm:	
500 hens	276
1,000 hens	391
1,500 hens	572
Stock Farm:	
20 animal units	197
50 animal units	247
100 animal units	367
Grain Farm:	
25 acres oats, 25 acres corn	187
50 acres oats, 50 acres corn	227
100 acres oats, 100 acres corn	290
Market Garden:	
10 acres, 3 glass houses each 200 feet by 30 feet	450
Fruit Farm:	
20 acres	170
50 acres	175

The average cost per kilowatt hour (a kilowatt hour is the quantity of energy consumed by an ordinary 50-watt lamp burning 20 hours) which such farms will have to pay for electric energy is likely to range between five and seven cents in the greater portion of the agricultural districts in the United States for some years to come. This, of course, includes any so-called minimum or fixed monthly charge named in the public utility rates.

The Franklins are immensely pleased with their electric service and nothing could induce them to part with it. They have been so successful that they are now planning to increase their farming operations. With the help of his former professors Frank has prepared an estimate of the electric energy required based on increasing the herd to 50 cows. Here is the estimate in detail:

Frank's mother asked him what her share of the monthly bill is going to amount to, or rather, that portion of the total bill for energy used in the farmhouse. Frank estimates that under the condition of the enlarged herd, the average cost of all the electric energy used (based on rates heretofore in force) will be in the neighborhood of five cents per kilowatt hour. On this basis the figures he prepared for his mother are the following:

Monthly Cost of Electricity Used in the Farm House

	KW hour	Cost per mo. at 5c per KW hour
Water for home (10 people)	9.1	.46
Lighting farmhouse	16.7	.84
Range	125.0	6.25
Toaster	2.5	.13
Sewing machine	1.4	.07
Vacuum cleaner	4.2	.21
Electric iron	6.0	.30
Washing machine	4.2	.21
		$8.47

We have not named an electrical refrigerator as a part of the farm's equipment. There are in the United States no less than 50,000 electric refrigerators in domestic use; some of these are on farms, and many more will be sold to farmers in the near future.

Mrs. Franklin no longer spends fifteen valuable minutes every day cleaning and trimming oil lamps and as much or more of her time lugging water from the well. Frank and his father are men of business. They are running a factory which produces milk. They have time, money and energy at their disposal to give to the development of the higher economies and economies of their business and they look forward to lives of comfort, culture and happiness in a calling which has hitherto contained far too much of drudgery and poorly requited toil.

The Franklin farm with its electrical activities is a myth, but it already has its actual counterpart in many places.

There are in the state of Pennsylvania 202,000 farms. If but one-half of these farms were to be electrified and their consumption of energy individually should average that of the Franklin farms as described with its 20 cows, namely, about 200 kilowatt hours per month, the total consumption of electrical energy for the farms of the state would be 242 million kilowatt hours per annum. This quantity of energy sold at five cents per kilowatt hour would amount to $12,000,000, which would be added to the gross income of the central stations of this state, and nearly as much more would be added from customers in rural districts who are not farmers. Twenty-four million dollars to be added to the income of the electric utilities of Pennsylvania through rural electrification is no mean part of the total income which they derive as measured by its economic significance.

*Reprint from "The Annals of The American Academy of Political and Social Science".

SPRING DAIRY COUNCIL CONFERENCE

(Continued from page 1)

of five stories called "A Trip to Healthland." These students will then make their own illustrative material and tell these stories to the children of the model school.

Camp Work

Martha Stedman Smith, formerly of this council recently appointed nutrition director of the Baltimore Dairy Council, who had charge of Camp Joy, Reading, Pa., last summer, outlined the plan and scope of that project, which she called "A Healthy Theory Put Into Practice." The work will be conducted again this summer, under the direction of Louise Elmore Northup.

Del Rose Macan, in charge of the Dramatic Department, outlined a typical day's program, giving details of the scope during various portions of the season. Miss Macan referred to the growing appreciation of dramatics in Health Education as an example of this class of endeavor in teaching the public. Miss Gertrude Munday presented the monologue "Putting Pep in your Motor", which was received with great interest and enthusiasm.

A dairy supper, was served in the council headquarters by members of the staff.

Miss Lucille Philbrook, demonstrated a tooth lesson by means of a "chalk talk" exclusively used in all important centres of Dairy Council Work.

C. I. Cohee, of the Quality Control Department, made a brief address on the scope of the "clean-up" work, presenting the following details:

Quality Control Department Statistical Report

March 1, 1924—March 1, 1925

No. sediment tests made	8,575
No. inspections made	16,741
No. meetings held	144
Total attendance at meetings	13,901
Average attendance per meeting	96
No. movies shown	67
No. miles traveled	137,571
Man days at fairs and exhibits	150
No. Temporary Permits issued to date	15,980
No. Permanent Permits issued to date	3,780
Total No. inspections made to date	19,450

This was followed by a mock inspection visit, outlining the methods of conducting, and inspection of a farmer's dairy, in which Dr. E. G. Lechner and Mr. C. A. Wilson, took part.

Following these demonstrations a general discussion of council work was held and programs laid down for a broad scope of work during the present year.

THE NEW NATIONAL SECRETARY OF AGRICULTURE

William M. Jardine, the new National Secretary of Agriculture has furnished the National Council of Farmers' Co-operative Marketing Associations with the following statement:

"As a means of bringing about more orderly production and marketing I can not overemphasize the need for strong efficiently managed, co-operative marketing associations.

"Co-operation is an effort to create a better system of marketing, to produce and market products that consumers demand, and to distribute there commodities with the least possible cost. It's most helpful feature comes from the education in business which farmers obtain in their efforts to conduct co-operative associations efficiently.

MILK PROFITS DAIRYMEN SHOULD KEEP

VETERINARIAN RECOMMENDS CLIPPING IN HIS PRACTICE

I clip cows with the best results—in every case an increase in milk and butter-fat and much more sanitation. I recommend clipping in all the dairies in which I practice. My practice covers fifteen miles of country.

DR. J. N. NICHO SON
Box No. 582, Salem, W. Va.

Are You Getting These Added Profits?

Clipped cows give more milk—from 2 to 6 lbs. more per day. The milk is usually richer; it is clean—stays sweet longer. Bacteria count is ten times a low as milk from unclean cows. Clean milk brings better prices at the creamery. Clipping is a big thing now with Testing Associations, Government Inspectors, Farm Paper Editors and Dairymen everywhere.

Filth adhering to the flanks, udder and underline of the cow chokes the pores on those parts so that the pores do not breathe as they should. This means that the cow's condition is not of the best. The cow will either give less milk or require more feed—or both. By clipping your milk cows, you save cleaning time; you save feed; you increase milk flow and butter-fat content. Four clipped cows will give you back the price of a clipping machine in a month.

HUNDREDS OF LETTERS LIKE THESE ON FILE:

EACH COW GIVES 4 LBS. MORE MILK DAILY

Since clipping the increase in daily milk yield per cow is 3 to 4 lbs. Milk is richer in butter-fat. Itis cleaner and stays sweet longer. Cows act more comfortable and contented. We also clip our young stock and our horses. Clipped horses work better, look better, feel better. Clipping keeps away lice. By clipping cows you get cleaner milk and the cows are more comfortable, making milking easier.

HARRY MARCUSEN,
R. F. D. 2, Denmark, Wis.

No. 1 Ball Bearing Clipping Machine

The Stewart No. 1 Ball Bearing Clipping Machine—known everywhere as the world's best clipping machine. Clips cows, horses and other stock. Turns easy—clips fast—anyone can use it. Equipped with the famous Stewart B-1 Clipping Head. Many Stewart Clipping Machines have been in continuous service upward of fifteen years.

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With wool at present prices no sheep owner can afford to be without a shearing machine. The machine gets a pound more wool per sheep than the hand blades. It does away with second cuts, bringer better wool prices. The Government says:

"The machines are more rapid, smoother work is done, and the ewes are injured less. It is easier to learn to use them, and more wool is obtained than where hand shears are used."—*Page 17, Farmers' Bulletin 840, U. S. Department of Agriculture.*

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It costs just what you pay for 1½ tons of feed, because that's all the average cow eats in a year. Realizing this, can you afford to feed any but the *best* dairy ration to your cows, especially when you know that good feed will return in profits many times its slight additional cost as compared with inferior feed? Quality and uniformity make Larro both highly productive and truly economical. Manufactured from a tested, proven formula that never changes, every sack of Larro is the same—no matter when or where you buy it.

Ask the nearest dealer

THE LARROWE MILLING COMPANY
DETROIT MICHIGAN

Larro

[657]

After breaking the world's record for the production of butterfat in ten months as a junior three-year-old a little over a year ago, Lyons Sarcastic Korndyke, a purebred Holstein-Friesian cow, recently completed a ten months' test period with a butterfat record which makes her the world's leading junior four-year-old over all breeds. Her 305 day record as announced by the advanced registry department of The Holstein-Friesian Association of America is 24,052.3 pounds milk and 854.88 pounds butterfat (1,068.6 pounds butter), for which she qualified by giving birth to a bull calf, weighing 130 pounds, carried for 200 days of the test period. The new record displaces that made by the former champion of this class, Bess Johanna Ormsby, another Holstein-Friesian, whose record of 1,043.65 pounds butter stood unbeaten since 1919.

The new champion made her record on the farm of Abner S. Deysher, near Reading, Pennsylvania, where she enjoys the companionship of several other of Pennsylvania's leading producers, including her dam, Charlotte Lyons Korndyke, who holds the highest butter record ever made in ten consecutive months by mature Holstein cows in the Keystone state.

Like all cows on test on Berks Farm, Lyons Sarcastic Korndyke received throughout her test a ration consisting of home-mixed grains, including oil meal, cocoanut meal, molasses and beet pulp. With the grain ration she received considerable quantities of good corn silage and alfalfa hay. She was kept in comfortable, light and roomy quarters, had constant access to fresh water and was given exercise out-of-doors every day.

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OIL THE HARNESS

Take care of your leather equipment at all times, but especially during the wet weather of spring months. Frequent washing and oiling should make a harness of the proper weight and grade last 15 to 25 years.

CENSUS COMPLETED IN 25 COUNTIES

Pennsylvania's triennial farm census is rapidly nearing completion. The Bureau of Statistics, Pennsylvania Department of Agriculture, has already received complete census reports, according to L. H. Wible, from the following counties; Adams, Bedford, Bradford, Cambria, Cameron, Clarion, Clinton, Cumberland, Dauphin, Elk, Forest, Franklin, Fulton, Juniata, Montour, Northampton, Northumberland, Snyder, Somerset, Susquehanna, Tioga, Venango, Warren, Wyoming and York.

A number of the schedules have also been received from other counties. It is expected that within the next few weeks the returns will be practically complete. As a rule the schedules show care on the part of the assessors in gathering and recording information.

The complete tabulation of Franklin county records shows 3,559 farms, 1,367 of which are rented. These farms have 396 silos, 391 tractors, 2,870 automobiles, 371 motor trucks and 82 radio receiving sets. A total of 381 farms are equipped with electricity.

Cambria county, according to the tabulation has 2,489 farms, 325 of which are rented. The leading small grain crop is oats with 14,779 acres reported. The farmers have 6,692 dairy cattle and 353 silos. Seventy-four of the farms have radio outfits and 464 are equipped with electricity.

The Bedford county census reveals 3,394 farms, 543 of which are rented. The leading cultivated crop is winter wheat followed closely by corn. The farmers have 13,628 dairy cows and 600 silos. A total of 273 farmers have tractors, 2,462 automobiles, and 268 are equipped with electricity and 64 have radios.

In Adams county 2,957 farms are recorded, 758 of which are rented. Winter wheat is the leading small grain crop. A total of 2,095 automobiles are shown and 330 of the farms are equiped with electricity.

The census reveals a vast number of interesting facts which will be used as a basis for important agricultural studies.

ICE CREAM PRODUCTION SHOWS DECREASE

Ice cream production in the United States last year was 9,000,000 gallons less than in 1923, production for the year being 285,550,000 gallons as compared with 294,900,00 gallons in 1923, according to figures compiled by the Dairy Products Marketing Division of the United States Department of Agriculture.

The smallest production last year was mainly because of the cool summer in many parts of the country, the department says. During the first three months of the year there was an actual increase in production, as was also the case in August and November. The remaining months showed a decrease compared with the previous year, with the exception of April when production was about the same as in April, 1923.

Figured on a per capita basis, the consumption of ice cream per person was 2.56 gallons in 1924, compared with 2.68 gallons in 1923, and 2.43 gallons in 1922.

REPAIR FARM MACHINERY IN SPRING, SAY EXPERTS

Much of Work Can be Done at Home at Great Saving to Farmer

Early spring is the time to make many of the repairs necessary to put farm equipment in shape for spring and summer. Some repair jobs may require the blacksmith, but many of them can be handled at home. Common sense and a little confidence in one's own ability will help a lot to put the job over, says L. M. Roehl, of the state college of agriculture at Ithaca.

One of the most important things is to clean well, both inside and out, all oil-holes and grease-cups. Grease-cups in particular are apt to need attention after standing all winter, and should be scraped out thoroughly and refilled with new grease. One should be sure that the oil or grease is getting to the parts to be lubricated, making sure by actual inspection of the bearings.

Look for broken or cracked castings; they sometimes show up by not ringing true when tapped gently with a hammer. Other points to watch are to be sure that new castings are ordered now, before they are needed, and that the order number is correct.

Bolts should be replaced where missing even if the part seems to hold all right without the full number of bolts. The manufacturer knew how many bolts were needed there when he designed the machine, points out Mr. Roehl, and to get best results each hole should be filled with the right size of bolt. If that is not possible, for the maximum strength, use the size that comes nearest to filling the hole.

To straighten bent rods or braces, take them off the machine for ease in handling, he advises. Wooden parts, which are rotted or broken, as binder reels, swath boards, and the like, should be replaced as soon as possible, and the new parts should be painted for the sake both of appearance and durability.

See that new sections are ordered for the mower knives, and broken ones replaced. Rivet heads should be smoothed down to minimize the friction caused by drawing dirt and grass into the guards.

All this repair work costs much more than it did a decade ago if the farmer has to hire it done, and the more the farmer does for himself the better off he is. In some cases it may pay a farmer to make an extra investment in tools so that he can do more of this work at home.

469,833 DOGS LICENSED IN 1924

A total of 469,833 individual dog licenses were issued by the State of Pennsylvania in 1924 besides several thousand kennel licenses. This is 54,000 more individual tags than were issued in 1923 and 175,000 more than in 1921 when the licensing was under county supervision. The list of individual dog tags issued in 1924 and 1923 showing totals for each county has just been issued by John L. Passmore, Bureau of Animal Industry, Pennsylvania Department of Agriculture, who is in charge of the dog law enforcement work.

Allegheny County leads the State, having 27,680 dogs tagged, an increase of 207 over 1923. Other leading counties are Luzerne, Westmoreland, Schuylkill, Fayette, Washington, and Berks.

Human labor and horse labor are by far the largest items of farming costs. Keeping watch of them pays.

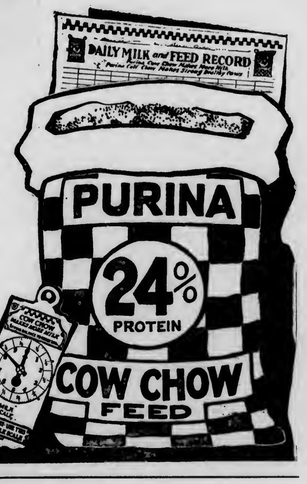
When they go off feed Cow Chow brings 'em back

AND this is the time they're apt to go off feed. They've been shut up all winter. They're bound to be a bit restless and fretful.

A little extra attention to their palates right now will mean a lot to you in the extra milk you get this spring. Purina Cow Chow will keep them on full feed and up in their milk.

Order Cow Chow from your feed dealer and keep the milk coming!

100-Page Cow Book—Free
Write for a copy of the 1925 Purina Cow Book—free without obligation.



PURINA MILLS, 854 Gratiot St., St. Louis, Mo.
Seven Busy Mills Located for Service

PREVENT COWS EATING GARLIC

One minute after garlic is eaten by a cow the disagreeable flavor and odor of this pungent plant may be detected in the milk. This is one of the facts brought out in an investigation carried on by the Bureau of Dairying, United States Department of Agriculture, and reported in Department Bulletin 1326, Effect of Garlic on the Flavor and Odor of Milk, by C. J. Babcock. The only practical way to prevent the appearance of this flavor and odor in milk in regions where the weed infests pastures is to keep the cows from eating the plant. In the tests, which were made by giving to several persons samples of milk from cows milked at different periods after having been fed garlic and from check cows, it was found that the intensity of the bad flavor and odor increased until it reached a maximum at ten minutes after feeding the odorous ration. Bad flavor and odor were present to an objectionable degree when the cows ate one-half pound of garlic tops four hours before milking. As the time between the eating of the garlic and milking time increased the bad flavor and odor diminished and in seven hours practically disappeared.

Not only were the garlic flavor and odor taken in by eating, but it was shown that inhaling garlic for ten minutes give strong flavor and odor to the milk. Milk drawn 90 minutes after inhalation of garlic was practically free from objectionable flavors and odors.

Copies of the bulletin may be obtained free, as long as the supply lasts, from the United States Department of Agriculture, Washington, D. C.

SCIENCE IN RELATION TO FEEDING DAIRY CATTLE

In 1887 Experiment Stations were established at the several Agricultural Colleges. This was made possible by an Act of Congress, making a definite appropriation for this purpose. This was the first movement, on a nation-wide basis, to place the different phases of agriculture on a scientific basis.

Because of the importance of the Dairy Industry, not only to the dairyman, but to the population as a whole, the feeding of dairy cattle has had a very prominent part in the work of all the Experiment Stations in the East. All our knowledge of Feeds, their proper combination, and their effect on the milk flow of the dairy cow, is the direct result of very careful scientific experiments on the part of the Agricultural College Experiment Stations.

The modern dairy business is based on, and is a result of such scientific experiments. The findings are not secret, they are open to the world, however, they must be applied before benefits can accrue to dairymen. It remained for the farmers' own organization to take full advantage of all the experimental work of all the prominent dairy states of the East. They were the first to use all the knowledge of feeds and feeding available and the first to put it to practical use in making a dairy feed the "Open Formula."

There are no secrets about the feeding value of any of the Ingredients now used in the manufacture of dairy feeds, or the proportions that should be used. When scientific experiments establish new feeding principles which will be of value to the dairymen they will be incorporated in the Open Formula by the farmer's own organization.

For better results feed Open Formula Dairy Feeds. Buy co-operatively. See the distributor in your community. If Open Formula Dairy Feeds are not distributed in your locality, write.

Pennsylvania Farmers' Cooperative Federation, Inc.

817-25 Heed Building **Philadelphia, Pa.**

29,697 HERDS AWAIT TUBERCULIN TEST

On March 1 a total of 29,697 herds of cattle in Pennsylvania were awaiting the first tuberculin test according to a monthly statement issued by the Bureau of Animal Industry. On that date, 240,536 cattle in 27,267 herds were under supervision for the prevention and eradication of bovine tuberculosis. It is estimated that more cattle are now awaiting the first test than have been under supervision on the accredited plan since this plan was started in April, 1918.

From April 1, 1918 to March 1, 1925, a total of 19,364 reactors to the tuberculin test were disclosed under the accredited plan and were eliminated from the herds of the State.

County wide tuberculin tests have been conducted on all cattle in Mercer, Crawford and Jefferson counties and work on a similar basis has also been conducted in 48 townships of 10 other counties. Altogether 136 townships in 13 counties have been given the area test.

Renick W. Dunlap New Asst. Secretary

Announcement has been made of the appointment of Renick W. Dunlap, of Ohio, as Assistant Secretary of Agriculture for the United States.

Assistant Secretary Dunlap, was born on a farm in Pickaway County, Ohio. He graduated from the College of Agriculture of the Ohio State University in 1895 and has spent most of his time on his farm near Kingston, Ohio. Until 1923 he operated this place as a grain, cattle and hog farm and since then has added a dairy.

For several years he was State Dairy and Food Commissioner of Ohio. Later he served as Secretary of the State Board of Agriculture, of Ohio.

"TUTS" A RECORD COW

"Tuts" a pure bred Holstein Cow won first honors in Pennsylvania Cow Testing Associations for January with a production of 2,538 lbs. of milk. The milk tested 3.9 per cent. yielding 99 lbs. of butterfat. She was kept under ordinary farm conditions but was milked three times a day. Her food for the month consisted of 540 lbs. of hay, 1,000 lbs. of silage and 650 lbs. of grain.

"Tuts" is owned by Mast Stoltzfus, Morgantown, Pennsylvania, a member of the Goodville Association in Lancaster County. Another Holstein cow owned by Mr. Stoltzfus produced 1,885 lbs. of milk during the same month.

The groundwork is being laid by the Bureau of Agricultural Economics for a systematic study for determining the various factors in crop production which bring about a change in condition of crops as the season advances. When these influences are determined and the relative effect of the various influences measured, a mathematical interpretation of those factors which are known in advance will assist materially in securing a closer approximation of the probable size of a crop.

To work more horses to the man helps get the most out of man labor.

PENNA. AYRSHIRE QUINTET AVERAGE 13573 LBS. MILK

Five Pennsylvania Ayrshires owned by four different breeders have lately completed Advanced Registry records which average 13,573 lbs. of milk, 568 lbs. of butterfat.

Carmela 3rd of Intervalley completed her first official record in the Senior four year old class with 15,080 lbs. of 4.47% milk, 674.29 lbs. of butterfat. In the fourth month of this lactation she produced 74.17 lbs. of butterfat. She is one of the representative Red and Whites owned by Barclay Farms, Rosemont, the home of this year's National Dairy Show Grand Champion bull.

Two more records of over 500 lbs. of butterfat are added to the list of exceptionally good records made at Penshurst Farm, Narberth. Penshurst Lady White, as a Senior four year old, gave 12,541 lbs. of 4.45% milk, 557.56 lbs. of butterfat. Her half-sister, Penshurst Bloomer, as a six year old, gave 13,443 lbs. of 4.14% milk, 556.26 lbs. of butterfat. This is her second official record. As a four year old she is credited with 8,587 lbs. of 4.11% milk. This year's production is an increase of more than 56% in yield over her four year old form.

The herd at the State College is rapidly forging to the front, through the combined results of their Red and Whites on Advanced Registry test and in the show-ring. Their cow, Sir Robert's Romona Bell, as a Junior two year old, produced 12,861 lbs. of 4.16% milk, 534.50 lbs. of butterfat, qualifying for the fifty-pound list ten of the twelve months of her test.

Old Forge Farm at Spring Grove during the past year has had several cows complete exceptionally good records. The latest Ayrshire to be ranked among the illustrious cows of the Keystone State is Seek-No-Further Constance, a five year old, which produced 13,938 lbs. of milk, 518.90 lbs. of butterfat for the Advanced Registry. Her production as followed month by month shows no extremes of yield, but her persistency of production makes possible a monthly average of over 1000 lbs. of 3.72% milk.

MILK IS DRUNK BY 131 UNDERWEIGHT PUPILS

Great benefits are being derived by the children of the Buchanan School, Chambersburg, Pa., in the nutrition work that is being conducted there.

Twice a day, at 10.30 a. m. and 2.30 p. m., one hundred and thirty-one underweight pupils of the school march in orderly procession to the corridors where the bottles of milk are arranged on tables and inserting a straw in a half pint bottle, drink said contents with a relish.

The children pay twenty-five cents a week for this service, the balance of the bill being defrayed by the school board.

—*Extract from local Chambersburg paper.*

PROMOTE FARM HEALTH

Thirty-six counties in Pennsylvania used knock-down community forms for making concrete septic tanks on the farm last year. Has your county adopted a program involving this very necessary assistance to farm sanitation? Ask the county agent or home demonstration agent about it.

PICK FROM THE BEST

Raise calves from only the very best cows. Milking ability is inherited, and inferior cows can produce only their own kind.

SEED CORN SELECTIONS

The time spent in carefully selecting, culling and testing seed corn has been found to be highly profitable by careful farmers. Good seed corn produces more vigorous seedlings that can ordinary quality corn. This justifies the farmer in spending all the time necessary to provide the best possible seed corn.

Last fall at husking time, corn had not yet dried out. It contained much more water than in average seasons and dried out rather slowly on account of the wet fall. There was much damage by mould and, no doubt, only the corn that had dried out early had escaped damage from the heavy freezes of the early part of the winter. The corn that still contained considerable water in it at that time, no doubt was either killed for seed purposes, or its health and vigor were very much impaired.

Careful selection and culling are therefore of unusual importance this spring, especially for those farmers who did not select their corn from the field and dry it out early last fall, but who depend upon selecting it from the crib this spring.

Select well-formed, medium sized ears, typical of the variety grown. The ears should be relatively heavy, with bright, well-formed grains, free from external signs of disease, shredded or discolored shank attachments.

A carfeul detailed inspection should then be made of each ear for the following characteristics of good seed corn.

(a) Cobs: Should be bright and free from discolorations caused by moulds and root rot organisms. A healthy ear is white inside.

(b) Grains:

1. Fairly large, well matured with plump tips.
2. Of good depth and medium indentation.
3. Backs glossy, free from soft starch and blisters.
4. Plump, creamy-white germs
5. Free from moulds and checks.

Discard ears that have the following defects:

1. Dead germs.
2. Mouldy kernels and cobs.
3. Rotted or shredded shank attachments or badly discolored cobs internally.
4. Shrunken kernels.
5. Blistered or checked kernels.
6. Dull, soft, starchy kernels.
7. Serious injury by mice.

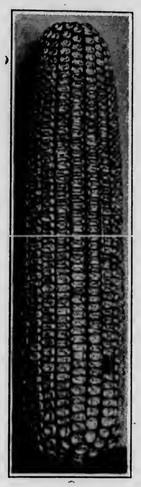
From each ear finally selected take two grains. Germinate this composite sample in a warm place, and after five or six days count the number of kernels that produce vigorous sprouts. If 95 per cent. or more are vigorous, it is safe to go ahead. If less than 95 per cent. germinate, it is doubtful, but if below 90 per cent something is seriously wrong, and the corn should again be culled over with more care or a regular germination test should be made of each ear, and all ears discarded that do not show perfect germination. For this purpose either a sawdust box or the rag doll germination may be used.

Finally, the shelling should be done by hand, shelling each ear separately into a pan in order to examine the grains, so that the final decision may be made.

—"Cecil Whig".

Mother nature hates bare land and she'll cover it with some kind of vegetation. It's up to the farmer to say whether it will be scrubby undergrowth or money-making timber.

NATIONAL CORN PRIZE



In a contest held under the auspices of the Sears Roebuck Agricultural Foundation, the best ear of corn, under competition by corn growers throughout the United States, the best ear was produced by a woman farmer in Illinois and her achievement won a prize of $1,000.

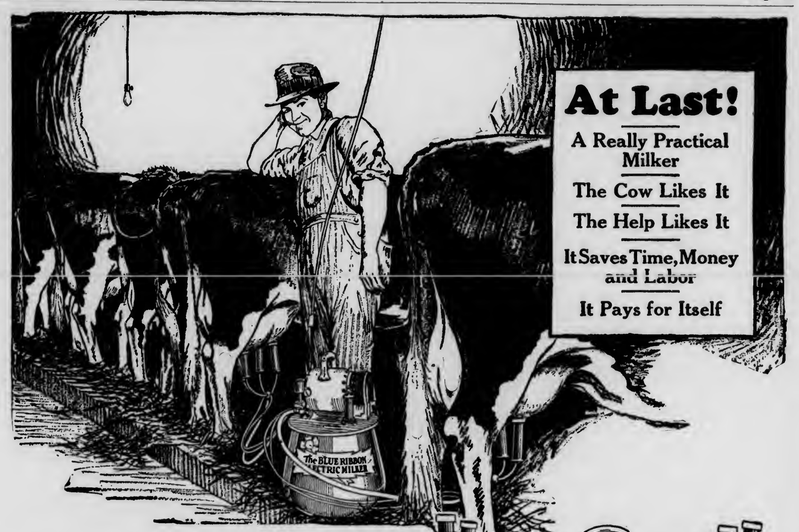
Announcement of this victory, over 30,000 competitors, from practically every state in the union was recently made at a "Corn Banquet" given at the Hotel Sherman, in Chicago, by the Foundation at which Agriculturists, business men and real dirt farmers participated.

The winner of the $1,000 prize was Mrs. Elsie M. Paluska, of Waverly, Illinois. The test of the champion ear, by the agricultural college proffessions, showed it to be 100 per cent perfect. Mr. and Mrs. Paluska, till a 160 acre farm in Morgan County, Illinois.

The winners of the State sweepstakes of the National Seed Corn Show, included among the forty-four winners, M. P. Prough, Sykesville, Maryland; F. O. Sapp, Houston, Delaware; C. B. Gordon, Trenton, New Jersey, and Wm. A. Townsend, Smithfield, Penna.

FARMERS BUY HIGH GRADE FERTILIZER

Farmers in Pennsylvania are buying more high grade fertilizer each year, according to the Pennsylvania Department of Agriculture which registers the brands and issues licenses for fertilizer sold in the State. The registrations received and accepted for 1925 by the Bureau of Foods and Chemistry have numbered to date 835 different brands covered by 96 licenses. The tendency for 1925 is in favor of an increasing proportion of sales of high grade mixed fertilizers over the low grade brand, states James W. Kellogg, chief chemist. Reports from fertilizer dealers covering the amount of fertilizer sold in 1924, while incomplete for the total year, show likewise that approximately 60 per cent more of the high grade brands of mixed fertilizer was sold during the year than low grade ones. This means that farmers are paying less for filler and are getting more real plant food for their money expended for fertilizer.



At Last!

A Really Practical Milker

The Cow Likes It

The Help Likes It

It Saves Time, Money and Labor

It Pays for Itself

The BLUE RIBBON Electric Milker

Absolutely No Installation Cost

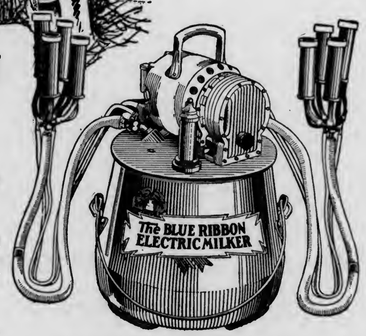
Every Farmer Can Afford One

JUST A FEW REASONS WHY:

1. Complete plant on the pail cover, self-contained and portable.
2. Runs by electricity—Central Station or Home Plant—the most uniform power known.
3. Low Operating Cost, using only ¼ H. P. motor.
4. Most reliable pulsator—thoroughly mechanical—steady, soothing and positive regularity of action.
5. Only a few parts—simple, compact and durable—extremely quiet in operation.
6. Nothing to clean but the pail, teat cups and milk tubes—little time necessary to keep in perfect sanitary condition.
7. Will milk 20 cows in an hour with only one man's supervision.
8. Always ready for work—starts at the touch of the switch.
9. Assures clean, sweet "Grade A" milk in greater quantity at lower cost—*bigger milk checks.*

Install a BLUE RIBBON and milking will no longer be a drudgery—your worries over help will disappear—time and labor will be saved. You will see your herd contented and giving down a larger quantity of milk, soon repaying your investment.

"An ounce of proof is worth a ton of talk"



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For Illustrated Catalog and Liberal Sales Plan

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No Obligation—You Are the Sole Judge

A Year to Pay in monthly installments if you and your herd are satisfied.

If dissatisfied return the machine at our expense and the transaction is closed.

SATISFACTION GUARANTEED

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Dept. N-425 105 So. La Salle St. CHICAGO, ILL.

GET MANURE FOR GARDEN

Many home gardeners, especially those located in or near towns or cities, have difficulty in securing manure in sufficient quantity. This can be avoided by ordering manure now and having it delivered during the winter and placed on a pile or spread over the garden. Waiting until it is time to begin outdoor operations before ordering the manure often delays garden operations or the gardener may be entirely disappointed. Have manure ordered and delivered before the spring rush.

PENNSYLVANIA

The William H. Moon Company, at Morrisville Pennsylvania, is milking around eighty head of Guernseys, so it is to be expected that they will have something to contribute to the dairy industry in the future. One of their cows, Combination King's Dolly 124047, milking in the 305 day Farmer's Division, meeting the pail twice daily, has produced 6,814.9 pounds of milk containing 322.40 pounds of butter fat, thus becoming the State Champion Guernsey in this Class.

The history of agricultural co-operation in the United States runs back to the Civil War. Records of the United States Department of Agriculture show that the first co-operative cheese factory was established in 1863, and the first organization of fruit and vegetable growers in 1878. Two organizations of grain growers were formed in 1887, followed in 1890 by an organization of livestock raisers. The co-operative movement has developed slowly while these and other pioneers were putting their theories into practice.

"Health Recipes"

A NEW COOK BOOK

Just the Thing for Every Housewife

Containing methods of using the health-protecting foods, milk and its products, fruits and vegetables

"Health Receipts" has thirty-six colored illustrations, and contains more than one hundred and seventy-five receipts in addition to seasonal menus.

A valuabe recipe book for the home kitchen. Useful also for teachers of cooking and home making. It is so arranged that it may be retained as a complete book, or separated into forty-five cards to fit into a standard size recipe box file.

Special Price to Inter-State Milk Producers' Association Membership

25c Postpaid

GET YOUR ORDER IN NOW

Philadelphia Interstate Dairy Council

BOYERTOWN BUILDING

1211 Arch Street

PHILADELPHIA

WHAT IMMEDIATE ACTION SHOULD DAIRYMEN TAKE IN SUPPORT OF TUBERCULOSIS ERADICATION

R. R. WELCH, Grove City, Pa.

The loss of millions of dollars annually is caused by the many contagious diseases, such as tuberculosis, hog cholera, contagious abortion, anthrax, glanders, black leg, etc. Without proper control these contagious diseases will spread and the losses will be larger from year to year.

We have just heard the report from Dr. T. E. Munce, Bureau of Animal Industry, Commonwealth of Pennsylvania, showing the splendid progress that has been made in tuberculosis eradication during the past two years. It is evident from this report that the State and National Bureaus of Animal Industry have made efficient use of the meagre funds available for this work. The cattle in three entire counties and in a large number of townships in other counties have been tested during the last two years, in addition to the testing of herds under the Accredited Plan in all parts of the State. The State Bureau of Animal Industry has the burden of the control and eradication of all contagious diseases in livestock and poultry.

This important Bureau of our State Government has been entirely dependent upon a part of the income from tax on dogs. This support amounts to about $300,000 annually, which has been entirely inadequate to carry on the work of disease control and eradication. Farmers in all parts of the State are clamoring to have their herds tested for tuberculosis. More herds are now signed up for the test than have been tested in all the years since the adoption of the tuberculin test as a means of eradicating this highly contagious disease. Many farmers have been waiting for the test for more than two years. Others who have had their herds tested have been waiting for months for payment of indemnity on disease cattle slaughtered. In some counties where over 90 per cent. of the herd owners have made application for the area test the outlook for getting the test applied seems hopeless. It seems that the only hope lies in raising of more dogs so that the income from dog tax will be increased. Yet the Bureau of Animal Industry is not even allowed all of the dog tax.

New York State is spending from $3,000,000 to $4,000,000 annually in tuberculosis eradication, and other States are obtaining similar support from their legislatures for this great work. When the farmers meet here at Harrisburg each two years and make requests and pass resolutions for more adequate funds for tuberculosis eradication, they hear the cry of economy. True, taxes must be reduced if possible. Yet, it is false economy that will allow this dreaded disease to spread to increasing numbers of our cattle from year to year.

The dairy farmers of this State are in danger of losing their markets. The State Board of Health ruling prohibits the sale of milk from untested cattle unless the milk is pasteurized. It is reported that New York City, Cleveland and other large cities will soon not allow milk sold in their borders from untested cattle, even though the milk is pasteurized.

The health of the farm boys and girls should be a concern to all. Yet thousands of these fine children are using raw milk daily from tuberculous cows, and no doubt many are contracting this disease. Millions will be appropriated by this legislature for hospitals to care for those suffering with tuberculosis. But the farmer is dependent upon the tax on dogs to protect his own family from this contagion.

There has never been anything like sufficient funds to keep up with the herd owners' demands for tuberculin testing. Farmers have waited for months to get their herds tested, and then waited still longer, in many instances, to receive indemnity funds for cattle slaughtered.

What will be done about this important matter? If the representatives in the legislature are informed as to the great needs, money will be made available and appropriated to meet the needs. It is our responsibility to see to it that our own representative knows the situation. There is immediate need for at least $2,000,000 for the next biennium, in addition to the entire income from dog tax.

FEDERAL LAND BANKS PASS BILLION MARK

The total resources of the twelve mutual Federal Land Banks have now reached the startling total of $1,019,790,591.82, according to Judge Charles E. Lobdell, fiscal agent for the Banks.

Reaching this mark puts the Federal Land Bank System among the largest and strongest financial organizations in the world. Nothing approaching the growth of these Banks has been achieved anywhere in the field of agricultural finance. Starting eight years ago with no organizations and only nine millions of capital, practically all supplied by the United States Government, 343,947 farmers have organized into 4,643 National Farm Loan Associations and through these into the compact organization of the Federal Land Banks. This is the more remarkable as the progress of the banks was halted for a year and a half by lawsuits with those who sought to destroy the entire system.

Every piece of real estate acquired through foreclosure has been at once charged off; every installment payment more than 90 days past due has been charged off; the sum of $11,939,423.99 has been disbursed in dividends. After making these charges and disbursements, $6,794,200 have been carried to reserve and surplus and there remain $3,285,297.77 in undivided profits.

Of the stock originally subscribed by the Government, $7,409,470 has already been retired and borrowing farmers have provided new capital to the amount of $48,346,815.

The income of the Banks is derived from the "spread" of one per cent, permitted by law between the interest paid on Federal Land Bank Bonds and the loaning rate. This has been found ample to cover expenses, underwrite foreclosures, and pay reasonable dividends upon stock.

The amortized (installment-payment) loan adopted by the Federal Land Banks has been shown to be the only sound method of farm financing. The plan is being gradually adopted by private farm loan agencies to the great benefit of agriculture.

MODIFIED "PHILADELPHIA SELLING PLAN"

In Successful Operation in London, England

Recently three reports came into the office from associations outlining some of the work being done by milk producers organizations in various parts of the world. The first was the annual year book of the National Farmers' Union of England. In this organization of over one hundred thousand farmers, are the organized milk producers of England who have a separate department within the organization with a special milk committee to look after the problems of the producers.

The report gives an explanation of the present method of operation of the National Farmers' Union milk scheme, the fundamental principle of which was taken back to England by Mr. E. W. Langford, past president and one of the most active members of the Union, who was impressed with the value of the Philadelphia selling plan while visiting here for the first time, perhaps three or four years ago, and who saw at once its application to conditions in the English market.

The scheme, which is very similar to that of the Inter-State Milk Producers' Association, has been successfully operated by the English milk producers ever since it was adopted. Due to climatic and other conditions in England, the basic months used have been November, December, January and February. This selling plan has stabilized the market so that the prices agreed to for the London market for the two years 1923-24, and 1924-25, have been and are, it is said, very satisfactory to the English producers as compared with conditions previous to the adoption of the plan.

The price for basic milk during 1924-25 is 18¼ pence per English quart. The price agreed to for the summer of 1925 for basic milk is one shilling per gallon. Under this plan during the winter months, basic price is paid for 90% of the basic quantity. During May and June, it is paid for 110%; during April and July, for 115%, and during August and September for all milk delivered.

Agreements similar to the one in effect in the London market apply in other market areas in England with slightly different price levels. It is evident, from the report that the method of arriving at understandings is very similar in England to that with which we are familiar in our territory. Representatives of the buyers and sellers meet from time to time and discuss the market situation and finally, after carefully canvassing the whole situation from every angle arrive at an agreement satisfactory to both sides.

California

We also have the annual report of the California Milk Producers' Association, Incorporated, covering the Los Angeles territory. This association, in its weighing and testing, follows out the general idea of our weighing and testing plan. During 1924 the California Milk Producers' Association handled milk of a value of $5,819,853.48. The expenses of the Association during this period were 1.03 per cent. (During the past year the commission of the Inter-State Milk Producers' Association cost its members .75 per cent. of the average value of the product sold.)

Michigan

The front page of the March "Michigan Milk Messenger," the official organ of the Michigan Milk Producers' Association, operating in the Detroit area, states that a special delegate meeting is called for Thursday, April 9th, 1925, to discuss the formation of a Dairy Council for the Detroit market, to be organized and operated as an affiliated unit of the National Dairy Council. This new organization will be financed, managed and conducted similarly to the Philadelphia Inter-State Dairy Council.

58 Bradford County Registered Holsteins 58

SPRING SALE OF 45 COWS, FRESH OR DUE SOON; 8 BULLS AND 5 HEIFER CALVES AND YEARLINGS

Livestock Sale Pavilion Troy, Penna. Saturday, May 9, 1925

An occasion to obtain desirable registered Holsteins from reliable dairymen-breeders who depend on high quality cattle for their income from milk production. Cow Testing Association, as well as Official and Private records are available as evidence of production, supported by popular and proven blood lines as a result of continuous use of high quality, foundation breeding stock. All but three entries are from herds under the Accredited Herd plan, most of which are fully Accredited. 60 day retest privilege and liberal health guarantee. The Sales Organization back of this event has established an enviable record for fair dealings to buyers. The sale policy is "All cattle honestly displayed and sold to the highest bidder." For catalog apply to D. K. Sloan, Towanda, Pa.

COW TESTING ASSOCIATION HOLDS BANQUET

The Coventry Cow Testing Association held its second annual banquet at Kimberton, Chester County, Pa., on Wednesday, March 25th. Nearly 90 farmers and their families participated.

This association was started four years ago and now has a record of being one of the largest in the state. Over 600 cows are on test. Over one half of the membership either has tuberculin free herds or have their application for such tests filed.

After an excellent banquet, Furman H. Gyger, acting as toastmaster, introduced the following:

President's Address, Homer L. Stoltzfus.

Secretary and Treasurer's Report, Howard Kulp.

Testers Report, Lewis S. Shingle.

Prof. E. B. Fitts, State College, Pa., made an address on the subject. "The Dairy Cow as a Market for Farm Crops."

Charles Bothwell, cashier of the "Farmers and Mechanics National Bank, Phoenixville, Pa., made an address on "Farm Accounts and Finance."

Dr. D. E. Hickman, made an interesting address on Tuberculosis Eradication.

John H. Halderman, Chester County Farm Bureau Federation, spoke on "Cooperation." William Vandergrift, Chester County Agricultural Extension Agent; Arthur M. Ray and Norris Matthews, also made interesting addresses.

The association is now planning for a "Field Day," to be held on the farms of two of its members, about the last week in May, when practical cow judging demonstrations will be given.

The officers of the Coventry Cow Testing Association are: President, Homer L. Stoltzfus, Pottstown, Pa.; Vice President, William M. High, Phoenixville, Pa.; Secretary and Treasurer, Harold Kulp, Pottstown, Pa.; and Clayton Emery, Tester, Honey Brook, Pa.

The banquet committee included Messrs. Furman H. Gyger, Lewis R. Shingle and Wm. M. High.

Unadilla Silos are Dependable

Dairy owners know from *experience* that Unadilla Silos will *keep* their silage in the best possible condition. They *know* they can depend on their Unadillas *year* after *year*, because of their *sturdy* construction. They are *air tight, water tight, frost resisting* and *weather defying*.

Get All The Facts!

Our *big handsome* catalog telling all about silos and giving complete information as to the *time* and *money saving features* of the Unadilla sent *free* upon request. Also complete information about the

Time Payment Plan

And the liberal discounts offered for cash and early orders. Save money and still get the silo that is used by more dairy owners in the east than any two other makes combined.

Don't overlook this opportunity—write today

UNADILLA SILO CO.
Box D Unadilla, N.Y.

UNADILLA SILOS

Your Guarantee!

Clean Milk

—and we prove it by actual test to your entire satisfaction. You won't find any dirt or sediment in milk after it has been through a Dr. Clark Purity Milk Strainer. The thick discs of sterilized cotton, tightly clamped to bottom of strainer, successfully remove every particle of dirt, dust, muck and other sediment. We positively Guarantee those results or refund your money.

Dr. Clark's **Purity Milk Strainer**

Used and endorsed by Agricultural Colleges, Dairy Inspectors and the largest Dairies and Milk Producers in the United States.

Made in two sizes:—10 quart and 18 quart. If your Dealer can't supply you, write us for descriptive literature and prices, giving your dealer's name.

PURITY Cotton Discs are made in any size from 5 1-2 in. to 7 in. diam., for all makes of strainers or filters. Send for a trial order.

Purity Stamping Company
Dept. F Battle Creek, Mich.
Worlds Largest Manufacturers of Cotton Discs for strainers and filters.

PAPEC Throws And Blows Saves One Man

The Biggest Value in Ensilage Cutters

SIMPLE, rugged, long-lived, the Papec fills the highest silo without plugging the pipe. Light of draft; costs less to operate. Positive Self-Feed saves one man. Every part of the Papec is easy to get at.

Four sizes: A gasoline engine, developing 3 h.p. or more, will operate the K-10 size. Any tractor can be used with the N-13 and L-16. For heavy tractors use a K-19 Papec, its capacity is practically unlimited. Prices low for quality.

Write for free Catalog

and U. S. Gov't Bulletin, "Making and Feeding of Silage." Every silo owner should read them. Mention size of your silo. Send today.

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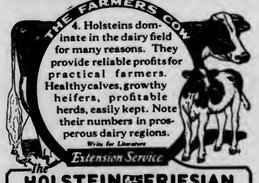
193 Main St.
Shortsville, N.Y.

Your Neighbor Has a Papec — Ask Him

HOLSTEIN



4. Holsteins dominate in the dairy field for many reasons. They provide reliable profits for practical farmers. Healthy calves, growthy heifers, profitable herds, easily kept. Note their numbers in prosperous dairy regions.

Write for Literature

Extension Service

The HOLSTEIN-FRIESIAN ASSOCIATION of AMERICA
230 EAST OHIO STREET, CHICAGO, ILL.

This FREE *Book tells how other Farmers stopped* Contagious Abortion

Fully describes causes and disastrous effects of this widespread disease, and points the way to an easily administered treatment that cannot injure animals and is guaranteed to end the trouble and prevent loss of calves. Write today.

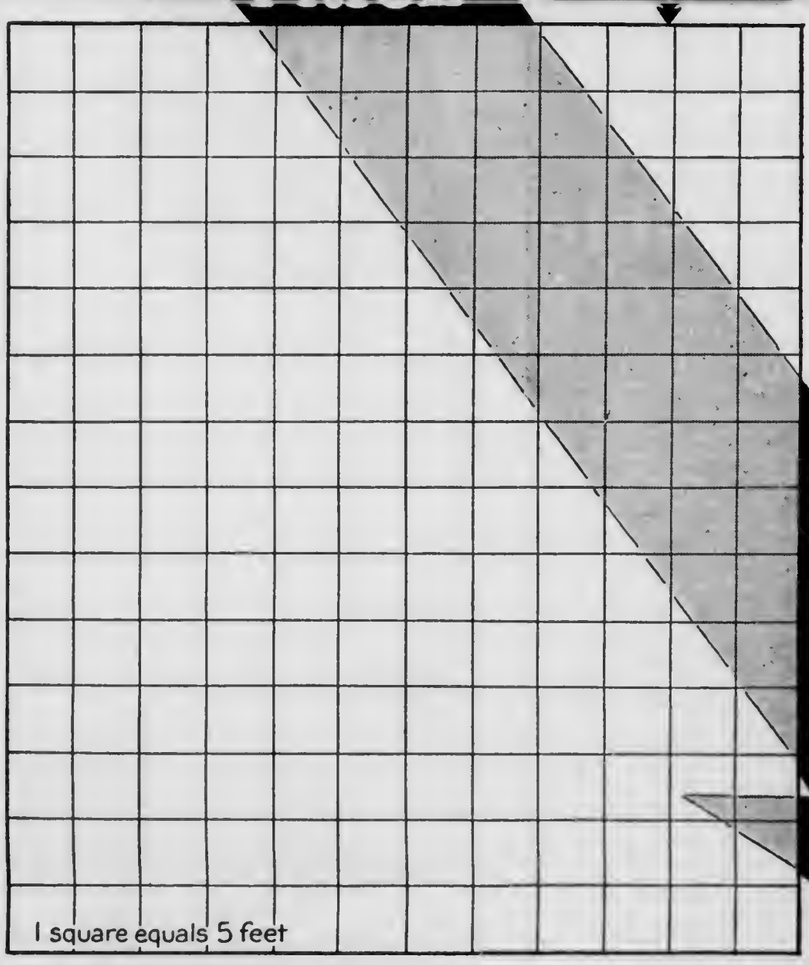
ABORNO LABORATORY
32 Jeff St. Lancaster, Wis.

Mention the Review When Writing Advertisers

Let us figure with you for a De Laval Milker

Send us this information and we will give you the PRICE

Make a sketch showing the arrangement of your cow barn and send it along with the information requested below. You will find it convenient to lay a thin sheet of paper over the ruled space below, using the cross lines as guides.



NOW that you are planning your work for the coming season you are looking for ways and means of increasing your profits, by cutting expenses or producing more. If you are milking 10 or more cows a De Laval Milker will help you do both. Plan now to get along with less help by installing a De Laval Milker, or plan to keep more cows with the same help you now have. Send us the information requested below and we will gladly send you, without obligating you in any way and free of charge, plans showing just how a De Laval Milker should be installed in your barn, and approximate prices. Then if you decide it would be cheaper to hire a De Laval Milker than to hire extra labor, you will have plans which will insure proper installation and satisfactory work.

A Wonderful Money Maker for Dairymen

Thousands of users say their De Laval Milker is the best investment they ever made and that they wouldn't part with it for twice its cost; many go so far as to say they would sell their cows if they couldn't have one. Your only regret after you put a De Laval Milker to work will be that you didn't get one sooner—and the longer you use it the better you will like it.

Conservatively figured, a De Laval Milker will make at least $20. per cow per year in saving time and increased milk which usually comes as a result of its use and because of its regular, stimulating and soothing action. A De Laval Milker usually makes much more than this, frequently saving one or more men.

In addition, when it is considered that cleaner milk can be produced, that the drudgery and dislike of hand milking are eliminated, and that dairying is made more pleasant for owner, son or hired man, you have the answer why so many people are installing De Laval Milkers.

Answer these Questions

Prices Reduced

Owing to the rapidly increasing use and popularity of De Laval Milkers, savings in their manufacture have been made which make possible reduced prices for 1925. There is now no longer a good reason why any owner of 10 or more milch cows should be without a De Laval Milker.

You Can't Get De Laval Results Unless You Use A De Laval Milker

It is possible to get mechanical milkers for less than the first cost of a De Laval—but you can't possibly get the same results. There are now more than 25,000 De Laval Milkers in use, and

—we have never known of one to injure a cow;

—the action of the De Laval is so pleasing and stimulating that cows almost invariably produce more milk;

—the De Laval is practically fool-proof and does not require a skilled operator;

—it not only milks better but faster, thus saving more time;

—it is easy to wash and keep in a sanitary condition.

Therefore, the De Laval is by far the cheapest in the end.

The De Laval Separator Company

New York 165 Broadway — Chicago 29 E. Madison St. — San Francisco 61 Beale St.

Free— De Laval Milker Engineering Service

THE DE LAVAL SEPARATOR CO., Dep't 9826
165 Broadway, New York — 29 E. Madison St., Chicago
61 Beale St., San Francisco

Gentlemen:

Without obligating myself in any way, I am sending you the following information, together with a sketch of my barn plan, with the understanding that I am to receive a drawing showing how a De Laval Milker would be installed in my barn and the approximate cost.

1. State maximum number of cows to be milked.....
2. How many rows of stanchions to be fitted up?.....
3. How many cows or stanchions in each row?.....
4. How long is each row of stanchions?.....Feet
5. How far between the rows of stanchions?.....Feet
6. Is there an alley from side to side?.....In center?.....On end?.....
7. Is there anything to prevent running a pipe line from stanchion row to stanchion row?.....In center?.....At end?.....
8. How high above the stanchion row will it have to be placed?.....
9. Have you steel stanchions?.....What make?..... or wooden stanchions?.....
10. How near to the stanchions in feet can the pump be placed?..... (Please locate on sketch)
11. Have you electric power?....If so, give Voltage....Phase...Cycle...
12. Have you a motor?....If so, state H. P.....Speed....Size Pulley....
13. Have you a gas engine?...If so, state H. P....Speed...Size Pulley...
14. How many milker units will you require?..... (One man with 2 units can milk and strip 20-25 cows per hour.)

Name.....

P. O. Address.....State.....

End of Volume